

The Socratic Turn

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Knowledge of Good and Evil in an Age of Science

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*To Florence and Leonard Sebell,
Edith Tagrin and Marvin S. Kaplan, and Anne and Joel Youkeles*

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As for any Obligations they owed to the *Antients*, they renounced them all. *'Tis true*, said they, *we are informed, some few of our Party have been so mean to borrow their Subsistence from You; But the rest, infinitely the greater Number . . . were so far from stooping to so base an Example, that there never passed, till this very hour, six Words between us. For, our Horses are of our own breeding, our Arms of our own forging, and our Cloaths of our own cutting out and sowing. Plato* was by chance upon the next Shelf, and observing those that spoke to be in the ragged Plight, mentioned a while ago; their *Jades* lean and foundred, their *Weapons* of rotten Wood, their *Armour* rusty, and nothing but Raggs underneath; he laugh'd loud, and in his pleasant way, swore, *By G——, he believ'd them.*

—Jonathan Swift, *A Full and True Account
of the Battel Fought Last Friday, &c.*

Introduction

Over fifty years ago, Robert Dahl argued that the difficulty with “traditional” or “normative” political theory, what seems to make it more akin to literary criticism, for example, than scientific analysis (1958, 97–98), is that it can “rarely, if ever, meet rigorous criteria of truth” (95). Dahl’s main point was not that he himself knew the criteria in question and knew, as a result, that they could not be met by political theory (cf. 97); it was that, so far as he could see, political theorists themselves had not made a serious effort to spell out the kind of evidence from which they take their bearings or the criteria on the basis of which they evaluate it. And in the absence of a serious effort along those lines, political theory necessarily suffers from a degree and kind of “vagueness” hardly compatible with an aspiration to be counted among the (social) sciences (97). Dahl demanded, therefore, that political theorists say with some “high degree of precision what would constitute a fair test of a political theory” (95, 97, 98).

On the other hand, in a seminal work that, according to one later assessment of it, more than any other in the 1960s “summed up the frustrations and hopes of the contemporary political theorists” (Scaff 1980, 1155; Gunnell 2006, 772) in the face of the behavioralists’ objections, Sheldon Wolin made a case against truth that is “rigorous, precise, and quantifiable” in favor of “tacit political knowledge,” as Michael Polanyi first put it (1964), which is none of these things (1969, 1069–77, cf. 1063). By Wolin’s own account, tacit political knowledge and the criteria of evaluating it—that is, “[judgments] about the nature and perplexities of

politics” and “judgments about the adequacy and value of theories and methods” (1077)—are indeed vague. Tacit political knowledge, he said, “is elusive and hence meaningful statements about it often have to be allusive and intimated. . . . Knowledge of this type tends, therefore, to be suggestive and illuminative rather than explicit and determinate” (1070). And the criteria of evaluating “the forms of theory built upon [tacit political knowledge]” (1071) are not less “elusive” than tacit political knowledge itself. “A certain sensibility is needed, qualities of thinking and feeling which are *not readily formulable* but pertain to a capacity for discriminative judgment” (1076, emphasis added). If tacit political knowledge is “elusive” and if, when it comes to the evaluation of it, “appropriateness of judgment cannot be encapsulated into a formula” (1076), it is indeed hard to see how what Wolin went so far as to call “the creation of theories” (1073) does not, as Dahl and others objected, fall into “the domain of literary criticism, where the study of the ‘meaning’ of a poem generally does not, even at the hands of the new critics, lead to an agreed interpretation” (1958, 97). Wolin, of course, did not think it did. But instead of articulating, “in rather careful language” (Dahl 1958, 97), the evidence or criteria on the basis of which tacit political knowledge or a theory founded on it could be sharply and exactly distinguished from “false, vague, unreliable, or even ‘mystical’” opinion (1071) or from mere “bias”—to which, even he himself granted, it surely has “a family resemblance” (1074)—Wolin seemed to argue that this could not and hence need not be done. Instead of doing so himself, at any rate, he (merely) gave eloquent and impassioned expression to the fact that there is something vague in the very nature of political phenomena, something of the utmost importance, which is lost sight of or obscured when we try to eliminate “extra-scientific considerations” or to recognize only “truth which is economical, replicable, and easily packaged” (1070–75). Moreover, when this “assault” (Tarlton 1970, 590) of his on the new political science called forth the not unexpected objection that it presupposed “an almost occult sense of the mysteries of politics, the magic of insight and sensitivity, the alchemy of special, unarticulated wisdom” (591; compare

Wolin 1969, 1071, 1074), Wolin's response was contemptuous and dismissive (1970, 592; but cf. Schaar and Wolin 1963, 146). He denied, in effect, that a political theorist needed to address the question with the "high degree of precision" that Dahl, for one, demanded (1958, 95–98).

Due in large part to its unwillingness or inability to meet the demand that it become "scientific," political theory was for a time deemed by its friends and foes alike to be "dead" or, at a minimum, in "decline" or "decay."¹ That passed, of course. Among other things, to be brief, unwelcome practical consequences of the behavioralists' "scientific study of politics"—the irrelevance of the latter to "the immediate issues of the day" (Easton 1969, 1055; Parenti 2006, 502–3), not least the war in Vietnam—combined with powerful critiques of positivism and its theoretical basis, the fact/value distinction, gave political theory a new lease on life (Ball 1995, 45–53). But the fall of behavioralism, an event that seemed to make room again for traditional political theory, was a peculiar thing; it was in a way, as one of the foremost historians of the discipline puts it, a "non-event" (Ricci 1984, 211; cf. Freeman 1991, 33). For the only clearly recognizable feature of the largely indefinable "behavioralist persuasion" was its "scientific outlook," which is to say, its claim that political science can and, what is more, should model itself after modern natural science (Ricci 134–36; Dahl 1961; Cobban 1953, 334). And this claim was never seriously questioned, much less abandoned (209–11).² It has in fact endured to this day (23).³ It is no wonder, therefore, that history seems to be repeating itself.

Political theory once again finds itself on the brink,⁴ and it has been driven there in large part by more or less the same objection that led to its first near-death experience. "From the heyday of the behavioral revolution to the present, political scientists have objected that political theorists are not 'scientific'" (Ball 2007, 1, 5). Not long ago, for example, King, Keohane, and Verba could express the demand—which, they pointed out, is usually met by the "quantitative-systematic-generalizing" branch of social science and usually unmet by its "qualitative-humanistic-discursive" (1994, 4) branch—that the methods of genuinely scientific

research be “explicit, codified, and *public*” by appealing to a statement made by Robert K. Merton some fifty years earlier (8). “The sociological analysis of qualitative data,” Merton said, “often resides in a private world of penetrating but unfathomable insights and ineffable understandings. . . . [However,] science . . . is public, not private” ([1948] 1968, 71–72). The vitality this objection has shown over the years is equaled by the vitality of political theory’s “go-to” defense against it. For example, in response to the fact that, today, too, “in the eyes of its critics, research in political theory resembles humanities research far more closely than it does scientific research” (2002, 578), Ruth Grant more recently set out to “articulate some of the common presuppositions, generally unspoken, that guide the ways in which research in political theory is done” (577). As impressive as her articulation of these presuppositions undoubtedly was (cf., e.g., 587–89), however, it did not meet the issue as political theory’s critics see it. “To political scientists, the perpetual disagreements among political theorists and the repeated reconsiderations of the same issues and texts are indications that political theorists lack meaningful standards for assessing what constitutes good research” (577). Yet, like Wolin, instead of making the case that political theorists can in fact appeal to such standards, she all but acknowledges that, even or precisely on their own presuppositions, they cannot do so. Certain “epistemological realities,” she says, leave the humanities—and political theory, it is conceded, belongs to the humanities (578)—exposed to persistent “uncertainties and disagreements” (581). And, insofar as “messy uncertainties and disagreements” cannot be removed from political phenomena (591–92), political theorists cannot be expected to spell out “in rather careful language” (Dahl 1958, 97) the means of their removal.⁵

In short, “the discipline is stuck in a time warp” (Parenti 2006, 506) and many of those who have been in the profession for decades feel “a profound sense of *déjà vu*” (Hawkesworth 2006, 153; Behnegar 1997, 98–99; Schram 2012, 20–21).⁶ “Empirical” political scientists continue to demand of their “normative” colleagues something the latter continue to insist, in turn, cannot or should not be done (Rehfield 2010, 466;

Freeman 1991, 31). Whether the former have an adequate grasp of their own demand, which would include an adequate grasp of what scientific knowledge is or should be, is not certain. However that may be, it is obvious that, whereas they for their part claim to proceed scientifically, their “normative” colleagues are generally unwilling or unable to claim as much for themselves (Brown 2010, 681). And this of course puts them in an awkward situation. For political theorists can hardly sacrifice the intellect or relinquish the mantle of science completely. In doing so, they would have to face the consequence that, just as their critics have been saying all along, “having a subfield of political philosophy in a department of political science is akin to having a subfield of faith healers in a medical school” (Kasza 2010, 699). It therefore comes as no surprise that political theorists tend to blur the issue. To return to the exemplary case at hand, immediately after asserting that “uncertainties and disagreements” can never be removed from the matters with which political theory is concerned, Grant adds, “nonetheless, those things can be understood in some sense; reasonable judgments about them are possible” (2002, 582, 584). But again, no attempt is made to articulate the evidence or criteria on the basis of which “reasonable” judgments could be sharply and exactly distinguished from unreasonable ones. And so it would not be altogether reasonable, given what she says here at least, to take Grant’s word for it that political theory can be reasonable (cf. White 2004, 10).⁷ Apologies for political theory too often boil down in this way to the recommendation that we must beware of throwing out the baby (“reasonable judgments”) with the bathwater (“false, vague, unreliable, or even ‘mystical’” ones). Recommendations to this effect tend to presuppose, however, without so much as trying to prove, that the baby is sharply and exactly distinguishable from—despite admittedly having “a family resemblance” to—the bathwater. On the other hand, if political theorists cannot relinquish the mantle of science completely, why not dispense with such half measures and simply lay claim to it themselves? That is to say, why not reject the separation of (political) science from (political) philosophy as an error once and for all?

This course, though it may be the only consistent one, is liable to be written off immediately by “normative” political theorists, to say nothing of their “empirical” colleagues.⁸ Traditional political philosophy, as Ronald Beiner broadly defines it, consists in “super-ambitious reflection on the human condition, on ‘the ends of life’” (2014, xxix) with a view to capturing the truth about “the normative foundations of human experience” (230, cf. xxvi). Simply put, it is the attempt to convert, by way of “critical examination,” our opinions about just or good things into knowledge of just or good things (cf. M. Sandel 2009, 27–30). However, the possibility of a successful attempt along these lines—the possibility, that is, of a genuine science of the matters with which political philosophy is concerned—is all but inconceivable today. Two almost insuperable, mutually reinforcing obstacles are especially responsible for this.⁹

In the first place, there is the difficulty that opinions about just or good things are, now as ever, controversial.¹⁰ And criteria on the basis of which mere opinion could be reasonably distinguished from knowledge are not clearly available (Berlin 1962, 4; Bookman 1970, 22–23; Pennock 1951, 1083). The oft-maligned “vagueness” of much political theory is due to this longstanding lack. But the modern distinction between “facts,” which are knowable, and “values,” which are not—a distinction which, now that it has been somewhat discredited, still lives on subterraneously even in the work of political scientists who no longer invoke it in broad daylight:¹¹ for example, in the guise of the distinction between “empirical” and “philosophic” or “normative”¹²—is not warranted by this age-old situation. “The beginning of scientific inquiry,” it is still popularly believed, “is the *fact/value dichotomy*” (Bond 2007, 899). Or, to quote from a now frequently used textbook, one of “the rules of the road to scientific knowledge of politics” is to “avoid normative statements” (Kellstedt and Whitten 2013, 17–18). So they say, but why? Do we know scientifically that scientific knowledge of “normative” statements is impossible, or is this just a hunch; in the end, a bit of “folk wisdom” or pseudoscience? It could seem to follow from the widespread disagreement about “normative” statements that criteria for reaching agreement about them are

necessarily lacking (Pippin 2009, 37; cf. Williams 2006, 157). In reality, it does not. Nothing follows from the hoary truth that “what is just and unjust is usually in dispute” (Rawls 1999, 5) but the incentive to resolve the disputes; which is to say, the incentive to engage in political philosophy.

If then it is not so much the age-old, widespread disagreement about the opinions or evidence from which political philosophy starts that, to our eyes, precludes the possibility of genuine or scientific knowledge of “values” from the outset, perhaps it is also, in the second place, a certain implicit, negative assessment of the evidence itself that does this? Apparently, “no one . . . can deny that post-Enlightenment science and mathematics (Newton, Darwin, Maxwell, Lorentz, Planck, Einstein, Bohr, Schrödinger, Heisenberg, Dirac, Hawking, Higgs) has infinitely eclipsed ancient understandings of the world” (Beiner 2014, 60–61). But according to Friedrich Nietzsche, who was perhaps the first and surely among the last to face this difficulty squarely, modern nonteleological natural science undercuts our prescientific awareness of the world or the world of “common sense” (Burt 1999, 303). That world, “the world that concerns us,” as Nietzsche called it, ceases to be the true or only one in the face of the “materialism” or “naturalism” of modern science (*Beyond Good and Evil* aphs. 34, 226). The latter implies or presupposes that the prescientific, common sense world is either a figment of the imagination or an epiphenomenon of matter in motion, or both. And since just or good things in particular belong to that world, modern natural science implies or presupposes that nothing is just or good in itself; the “is,” *as it is conceived by modern natural science at least*, excludes the “ought” (aph. 9). From the outset, then, modern natural science serves to undercut the evidence from which traditional political philosophy takes its bearings. In its shadow, ordinary opinions to the effect that something is in itself just or good can no longer be accepted at face value.¹³

Now, for the sake of clarity, let us double back and retrace our steps. Beginning at the end, then, “the modernist separation of the ‘fact-orientation’ of politics from ‘abstracted’ theory is itself tied . . . to the

growth of forms of philosophical materialism, naturalism, empiricism, and positivism in the late nineteenth and early twentieth centuries, and its consequent seepage into common sense. The ‘factual-orientation’ view of politics is thus the product of certain comparatively recent historical developments” (Vincent 2004, 9). That most “empirical” political scientists presuppose the validity of these developments is obvious.¹⁴ It is considerably less obvious, however, that most political theorists do too. And yet, as suggested, even political theorists and others who appear to resist or reject the developments in question actually do so, almost without exception, only to a limited extent. For they do not seriously question, much less consistently deny, the developments’ necessary consequence: the separation of (political) science from (political) philosophy and the impossibility of scientific knowledge of “values.” They tend, instead, to disagree with their fundamentally like-minded “empirical” colleagues primarily about the implications of this consequence or about *its* consequences.

To put this more exactly, it is agreed on all sides that “values,” in particular, transcend or fall short of the reach of science. As for “the ongoing methodological crisis of social science” (Gerring 2001, xv), it has to do with the disagreement that then arises over whether what transcends or falls short of the reach of science or human reason still deserves a hearing.¹⁵ And at this point a difficulty emerges for political theory. For, unless “having a subfield of political philosophy in a department of political science is akin to having a subfield of faith healers in a medical school,” “a hearing” necessarily means, first and foremost, a hearing before the tribunal of human reason.¹⁶ And those who maintain that “values,” though they buck reason, still deserve a hearing before reason are bound, as this ambiguous or even self-contradictory formulation itself suggests, to have difficulty articulating their position in clear and distinct terms.¹⁷ The difficulty, to say it again, follows from the fact that, notwithstanding their acceptance of the distinction between the sciences and the humanities, as well as of political theory’s place among the latter as opposed to the former, they can hardly relinquish the mantle of science completely.

Inevitably, they are forced into a kind of halfway house.¹⁸ And since it is unintelligible to say political theory does and, at the same time, does not merit the name “science,” the effectual truth of their position is an almost fanatical obscurantism.¹⁹ In this way, that sector of the discipline not shaped by modern natural science more or less directly is still shaped by its reaction to it.

In this situation, political theorists can hardly avoid making an experiment at least of leaving their all but anti-theoretical halfway house and laying claim to the mantle of science themselves.²⁰ This is much easier said than done. For it requires, to repeat, *both* the discovery of criteria, or a method, for converting our opinions about justice into knowledge of justice *and* a defense of those opinions, especially over and against modern natural science’s implicit, negative assessment of their cognitive status. And it seems unlikely that these two requirements can ever be met. Still, the fact remains that to seem unlikely is one thing, to be impossible another. And, given this difference, the following study cannot be written off merely for exploring the possibility that they can be met, indeed, to add unlikelihood to unlikelihood, that they already were: in classical Athens, by Socrates.



This is not the first or only attempt in recent times to solve a peculiarly modern problem by recourse to the thought of the past. It suffices to mention in this connection the work of Hannah Arendt, Alasdair MacIntyre, Martha Nussbaum, and Leo Strauss. But why should we look in this case to Socrates of all people?

We have it on good authority that political philosophy was founded by Socrates. It was Socrates, according to Cicero, who first called science or philosophy down from heaven—or rather, away from the study of the whole of nature—established it in the cities, introduced it also in the households, and compelled it to inquire about human life and manners as well as about good and evil.²¹ Similarly, Aristotle, Plato, and Xenophon

seem to say that Socrates concerned himself exclusively with the ethical or human things, and—contrary to his philosophic predecessors, the so-called pre-Socratics—not at all with the whole of nature.²² He did so, they seem to say, especially or only as a result of practical considerations, for whereas natural science does not “matter” much or at all to human life, political philosophy surely does.²³ The first philosopher was famously ridiculed for falling into a well because his head was in the clouds (*Theaetetus* 173e1–174b7); Socrates, it seems, was just the first philosopher to get the joke. In that case, however, “the Socratic turn,” as the founding in question has come to be called, would be only indirectly relevant to the awkward situation in which political theory finds itself today. For even granted that Socrates acquired “the true political art” (*Gorgias* 521d7–8), as he put it, by methodically examining opinions about just or good things, the success of modern natural science still presents a difficulty. Doubts about the assumption that it is theoretically possible to examine opinions about just or good things would not be directly affected by, indeed, they would continue to subvert, the examination of them. For how could the conclusions of an examination whose premises—in this case, common sense opinions—are deprived of cognitive value by what passes for science amount, themselves, to science? In this regard, the experience of the last century or so is telling. For example, “in Husserl on the life-world; in Heidegger on pre-predicative experience, being-in-the-world, and the everyday; in the later Wittgenstein, Austin, Cavell,” Robert Pippin finds, “an appeal to ‘the ordinary’ as a way of bypassing, avoiding, not refuting the supposedly reductionist, skeptical, disenchanting, enervating trajectory of modern naturalism” (2003, 344). But however enervating modern natural science may be, if it has not been refuted, if it remains “the most rigorous and authoritative body of knowledge we have” (344), it cannot be reasonably or consistently bypassed in favor of “the life-world.” Our concern for “what matters” (utility) can never wholly extinguish our concern for truth, and an analysis of “the life-world” cannot be truer than “the life-world” itself.

On the other hand, even if practical considerations played a role,

more went into the Socratic founding of political philosophy than the usual sources seem to say. Cicero's suggestion that Socrates founded political philosophy tends to elicit the objection that philosophers, and not only philosophers, gave serious thought to politics prior to Socrates. But Cicero was not unaware of this fact. And to suggest in full awareness of this fact that it was, nevertheless, Socrates who founded political philosophy is to suggest that serious thought about politics does not qualify as "political philosophy" unless it meets certain criteria, criteria which were not met by political thought prior to Socrates. "In early Greek philosophy the emergence of political philosophy and of a special field of politics was obscured by the [pre-Socratic] attempt to include all phenomena within 'nature' and to explain their workings by a common unifying principle" (Wolin 1960, 29–30). That means, before Socrates could develop a method for converting our prescientific, common sense opinions about justice into knowledge, he had to mount a theoretical defense of those opinions, especially over and against pre-Socratic natural science's explicit, negative assessment of their cognitive status. The question of the *basis* of common sense opinions about good and evil had to be approached in such a way as to enable science, for the first time, to have genuine access to the question of their *content*. And a closer look at the usual sources corroborates the suggestion that Socrates founded political philosophy, or rejected natural science, especially or also as a result of theoretical considerations; which is to say, as a result of a concern with the whole of nature.²⁴

There are, therefore, reasons to entertain the possibility that the Socratic turn is still directly relevant to the situation of political theory today. For the pre-Socratic natural science that Socrates rejected surely shares with modern natural science certain fundamental assumptions and objectives. Both seek more or less single-mindedly to explain human behavior, for example, "reductively," that is, in terms of underlying material or efficient causes. And the causal accounts or explanations of human behavior ordinarily offered up in speech, explanations in terms of this or that end or "value," are thus written off as red herrings by both. Yet if

modern and pre-Socratic natural science share certain fundamental assumptions and objectives, then perhaps Socrates' theoretical reasons for rejecting the latter still have a bearing on our stance toward the former?²⁵ If so, and if indeed Socrates acquired "the true political art" by examining opinions about just or good things in accord with a method whose evidence or criteria are in principle "public, not private," then perhaps scientific knowledge of "values" is not impossible after all?

Perhaps. But it is a long way, to say the least, from these *prima facie* reasons to the conclusion that Socrates originally conceived of political philosophy, both its basis and its method, in such a way as to safeguard it in advance against the difficulties that especially prevent it from laying claim to the mantle of science today. But we know where to start at any rate. For before Socratic political philosophy can be assessed, it must be understood. That inevitably means asking why—owing to precisely what reflections and concerns—Socrates founded it as he did. And Plato poses this question to his readers. For his Socrates was himself engaged in pre-Socratic natural science in his youth, and it was only much later in life, after turning away from pre-Socratic natural science, that he became a political philosopher. But Plato does not merely pose the question of Socrates' intellectual development; he gives a comprehensive account of it whose aim is to help his readers undergo a similar development for themselves. That account is therefore the immediate focus of the following study.

The study has seven chapters. Chapter 1 discusses the way the comparatively recent preoccupation with Plato's intellectual development has led scholars to disregard the question of Socrates' intellectual development. And it situates Plato's account of Socrates' intellectual development in the context of the Platonic corpus. Then, on the basis of that account, Chapter 2 goes on to show that materialistic natural science is an attempt to confirm—and that it is of the essence of "antiscience" to deny—the basic premise of science as such; namely, that nothing can come to be without a cause. At least to begin with, as E. O. Wilson says, "reductionism is the primary and essential activity of science" (1999, 59). But, through an analysis of what a cause or a causal account is, Chapter 3

demonstrates that materialistic natural science is not equal to its task. As a matter of fact, it is derivative, incoherent, and incomplete. If Chapter 3 broaches the problem of science and its limits, Chapter 4 develops it more fully. It does so in such a way as to convey something of the true scope and depth of the so-called mind-body problem. For, contrary to popular belief, that problem is not, or not merely, the problem of the emergence of minds from bodies. Rather, we find ourselves in a world ordered into distinct classes or kinds of beings, and this heterogeneity is demonstrably noetic in origin. The beings of our experience—including “rocks,” to give the pertinent example—depend on mind for whatever unity they have. And we see in this way why natural or scientific teleology, as opposed to materialistic natural science, would alone seem to be worthy of the name “science.” (Partly because they aim to convey something of what science originally meant, which is hard to do today, Chapters 2–4 are more drawn-out than the rest.) Chapter 5 shows that even natural or scientific teleology is no more conceivable than materialistic natural science, however. The beings of our experience cannot be fully understood—either “from below” (materialistically) or “from above” (teleologically)—and this, the full understanding of this, leaves science itself teetering on the brink of collapse. Chapter 6 turns to the situation of man in society as it appears in light of the insight into the limits of science. And while it shows how knowledge of these limits makes it practically necessary for its possessor to examine opinions about justice, Chapter 7 shows how this knowledge finally makes it theoretically possible for its possessor to do so. Here we begin to make out what science is or can be when it is fully aware of the limits beyond which it cannot go if it is to remain science.²⁶ And we see how exactly—by what method—opinions about justice, for one, are to be scientifically examined. The Introduction and Conclusion have to do with nihilism. All together, the following study focuses on the basis and method of political philosophy—on the cognitive status of the evidence from which political philosophy takes its bearings, in the first place, and on its manner of handling the evidence in question, in the second.

PART I



Chapter 1



The Problem of the Young Socrates

Socrates' "Pre-Socratic" Past

For a long time now, scholars have been preoccupied with the question of Plato's intellectual development. The well-known fact that the question cannot be answered with certainty, in large part because we lack unambiguous evidence for it from within the Platonic writings themselves or even from ancient sources more generally, has not discouraged scholars from forming, by turns, consensuses and factions in regard to it. Their willingness to pronounce with such confidence on an essentially open and controversial question is surely a testament to the state of the discipline. Despite or because of this, we are reminded of A. E. Taylor's caution that "a thing is none the more certain because it has been pronounced *allgemein bekannt* by a chorus of *Herren Professoren*."¹ To be sure, Plato himself, whose testimony in this matter should count for something, does not give a single clear indication that his own thought ever developed or changed after he began writing. What he does, on the other hand, is devote a significant portion of his writings to the question of (his)² Socrates' intellectual development. Socrates' intellectual development is immediately accessible to every reader through unambiguous evidence found within the dialogues themselves; Plato's, or what is alleged to be Plato's, is not. As opposed to the latter, which is necessarily a

matter of ingenious conjecture, the former can be recognized and charted by proceeding in the way that Plato, as a writer, must have wanted us to proceed: by closely reading the dialogues he wrote. As it seems, then, in their preoccupation with the question of Plato's, but not Socrates', intellectual development, orthodox scholars have turned away without explanation from a question Plato makes much of, toward a question which, in addition to rendering unrecognizable the question he makes much of, his dialogues give no explicit permission or incentive to ask.³ That Plato considered the intellectual development of a thinker of the highest order to be a serious question cannot, therefore, be doubted for a moment. But it is not his own development that Plato's dialogues explicitly draw our attention to and, by doing so, call upon us to reflect on; it is, rather, to the development of a Socrates become "beautiful and young" (*Second Letter* 314c2–4).

At his trial, in response to the official charges brought against him by his accusers—approximately, that he does not believe in the gods in whom the city believes, but in other daimonic things, and that he corrupts the young (*Apology* 24b8–c2; cf. D.L. 2.40)—Socrates brings up slanders or rumors about himself that originated long ago to the effect that he investigates nature and practices rhetoric (18b4–c4, 19b4–c2, 23d2–7). To the official charges brought against him by his accusers he therefore adds these old, unofficial charges or rumors, which he traces back to Aristophanes' *Clouds* (18d1–2, 19c3). Socrates thus brings it about at his trial that he is accused not only of what he was in fact accused of but also, among other things, of being a natural scientist. And he then goes on to defend himself, less than satisfactorily, against this rumor-charge. He does not, he claims, possess such a science at present (19c5–6, c9–d1). As for his past, a time when he did perhaps claim as much for himself, he merely asks whether the members of the jury have "ever" heard him at any time conversing about natural science, either much or little (19d4–6). This does not settle the matter; Socrates does not always speak in public (cf. 17c10, 33b7),⁴ and many of the members of the jury were children at the time in question (18b5, c7). On closer inspection, the

very argument Socrates uses to challenge the rumor that he is or at least at some point was a natural scientist leaves open and even points to some room in his past when he might have been one. Besides this, Socrates makes it clear that he maintains even now, in his maturity, a certain admiration for natural science (19c6–9, e1–2), an admiration that is qualified, it seems, only by doubts as to its possibility (19c5–6, c9–d1).⁵ The doubts that qualify his admiration are no less telling than the admiration itself. For if Socrates has come to the conclusion that no human being can truly possess natural science (compare 19c5–d1 with 23a5–b4),⁶ and if this conclusion of his is a reasonable or nondogmatic one, must he not have engaged in some way in natural science? And we know for a fact that he did engage in it, and not merely “in some way,” but as a natural scientist himself. For when he is beyond the reach of the Athenians’ indignation, or already in the grip of it, on the day of his execution, Socrates gives an intellectual autobiography in which he openly admits that, contrary to the impression he gave at his trial, he was indeed, as Aristophanes had alleged to begin with, a natural scientist at least in his youth (*Phaedo* 96a6–100a8).⁷

Eventually, to be sure, Socrates ceased to be one. Turning away from the natural science of his philosophic predecessors, the pre-Socratics, Socrates turned to the examination, in which we see him, in his maturity, almost constantly engaged, of his own and others’ moral-political opinions. This revolution or turn in Socrates’ thought, which Plato unmistakably draws our attention to, has been rendered so unrecognizable by the preoccupation of orthodox scholars with the changes they somehow detect in Plato’s thought that, until rather recently, it did not even have a proper name of its own. And yet if we step back and take a larger view of the matter we see at once that what has come to be called the Socratic turn is not a new discovery at all; it is merely a rediscovery or a return to an older thing that is “*allgemein bekannt*” by a chorus of great thinkers, a chorus led by Plato himself. For, according to the traditional view, Socrates turned away from natural science, the study of his philosophic predecessors, in order to investigate the human or political things.⁸

Why Plato, to say nothing of Socrates himself, was so reluctant to admit or so keen to conceal Socrates' "pre-Socratic" past and subsequent intellectual development will become clear as we proceed—provisionally, it would seem to have something to do with the fact that natural scientists were or were widely believed to be guilty of atheism, a capital crime (*Apology* 18b4–c4, 23d2–7, 26d1–9).⁹ But that, if not why, Plato treats the matter delicately is evident enough from a brief survey of its place in the corpus. Of the thirty-five dialogues that have been handed down to us as Platonic, only about three are narrated or reported by someone other than Socrates.¹⁰ And this device does not seem to be "unnecessary elaboration."¹¹ For these three dialogues, the *Phaedo*, the *Symposium*, and the *Parmenides*, are also the only ones in which we are permitted to see something of the young Socrates.¹² And, as Laurence Lampert says, "[this] cannot be an accident."¹³ In other words, in the dialogues where we have unequivocal evidence that the impression given by Socrates at his trial, that is, that the rumors about his "pre-Socratic" past were false, was a misleading one, Plato beautifully ensures at the same time, by confining that evidence to the only three dialogues wholly narrated by someone other than Socrates, that it, too, has the character of a rumor.¹⁴ As for which to trust, the rumors (including the *Phaedo*, the *Symposium*, and the *Parmenides*) or Socrates' repudiation of the rumors (in the *Apology*), it is not hard to decide. Socrates' repudiation, if we can even call it that, was strangely open-ended and even suggestive of a certain way the rumors might hold weight,¹⁵ whereas the rumors are conveyed or spread, as it were, by Plato himself. By conveying the truth about Socrates' past and subsequent development in this way, through rumors, Plato makes an effort to conceal it. But this effort at concealment is so manifest that it also serves to reveal that truth and, at the same time, to reveal that he, together with Socrates, regarded that truth as a "touchy" one.¹⁶

As almost goes without saying, a complete account of Socrates' turn or intellectual development would require an understanding of the relevant passages of the *Phaedo*, the *Symposium*, the *Parmenides*, and, what is more, the *Apology*. For our present purposes, however, we may limit

our study to the most important of these: Socrates' intellectual autobiography in the *Phaedo*. Although the intellectual autobiography is somewhat sparing when it comes to what Socrates learned from his later conversations with Diotima, on one hand, and Parmenides, on the other, it is comprehensive in a way that those narrowly focused (but, within those narrow limits, deeper) exchanges are not—in the end, *they* have to be understood in light of *it*. When it comes to what the *Apology* refers to as Socrates' "Delphic mission," the intellectual autobiography barely scratches the surface; it is not just somewhat sparing. But again, in the end, the "Delphic mission" has to be understood in light of Socrates' intellectual autobiography in the *Phaedo*, not vice versa. As we will see, the latter makes such a profound contribution to our knowledge of the grounds and character of Socrates' lifelong scientific enterprise that it may well be the single most important passage in Plato's dialogues.¹⁷ Still, in concerning ourselves with this passage, as important as it may be in its own right, we cannot forget that it is a part of a larger whole. What is its place, then, in the *Phaedo* as a whole?

Socrates' Intellectual Autobiography in Context

The *Phaedo* takes place on the day Socrates' death sentence is to be carried out, in the prison where he has been held since being found guilty, at his trial, of the charges brought against him. As the dialogue's young narrator would have it at any rate, the conversation recounted in it is, as usual, a philosophic one (59a3–5). What it is broadly concerned with is either the problem of death or, more on the face of it, the immortality of the soul. The bulk of the conversation is initiated when Simmias and Cebes, the two youths with whom he chiefly speaks on this occasion, charge Socrates, respectively, with neglecting them, his friends (63a7–9), on one hand, and with neglecting himself (62d8–e7), on the other, by going to his death so willingly. In response to his young friends' reservations about his justice and wisdom (prudence), Socrates musters a

defense or an “apology” on his behalf (63b1–2). Whatever else that apology (63e8–70b5) may accomplish, though, it does not even try to meet the steep condition that Socrates himself stipulates it must meet if it is to be a successful one (63b5–9, 69d7–e4). In the wake of its failure (69e5–70b4), which he immediately admits (70b5), Socrates sets out to meet the condition in question. He sets out, that is, to establish the soul’s immortality. He characterizes his attempt along these lines rather strangely, however, as one that is *both* an examination *and* a mythology (compare 61e1–2 with 70b6 and 70c4). Stranger still, he does this despite having made it perfectly clear that, as capable as he is of making speeches or reasoned arguments (*logoi*), he cannot mythologize (61b5, cf. 108d1–9, 114d1–2)—the philosopher follows reason (84a7–b1, *Crito* 46b4–6).¹⁸ However these oddities may have to be understood,¹⁹ Socrates’ initial battery of (three: 70c4–72d10, 73c5–76e7, 78b4–80d4) arguments (or myths) pertaining to the immortality of the soul prepares the ground for a “repetition” of his apology (80d5–84b4) that, having been thus prepared, is somewhat more persuasive to his young friends than the original (compare 88c8–d8 as well as 84c1–d3 with 69e5–70b4). It too persuades no one in the long run, however. Simmias and Cebes are moved almost at once to offer up objections (84d4–88b8). As for Socrates himself, immediately after concluding the battery of arguments, even (or precisely) he admits that they have, in the final analysis, been a failure (84c5–8, cf. 85d4–e2, 86d4–e4, 95b5–6).²⁰ And yet, while Socrates was incredulous all along, the same cannot be said for many of those listening, who had indeed, as they believed, been fully persuaded by him (88c1–d8). These poor listeners are not freed from the pleasant spell cast by Socrates’ arguments until Simmias and Cebes offer up their objections (88c8–d8). After rallying them, in consideration of the pain and, what is more, the hostility to reason all too easily incited by the breaking of the spell (89a10–91c6), Socrates disposes in the first place, “somehow” (95a4–6), of Simmias’ objection (91e2–95a6). He then turns to the objection of Cebes. And it is in place of, or as, a reply to Cebes’ objection, that Socrates gives at this point in the conversation his intellectual autobiography.

Let us therefore take a somewhat closer look at the circumstances surrounding this event.

After the initial battery of Socrates' arguments, it is apparent to Cebes that, whatever else those arguments have achieved, they have not even advanced beyond square one when it comes to establishing the soul's immortality (compare 86e6–87a1 with 77b1–c6 as well as 69e5–70b4). According to Socrates' second recapitulation of it (95b5–e4), then, "the sum and substance"²¹ of what Cebes seeks by means of his objection (at 86e6–88b8) is, quite simply, to be shown that the soul is imperishable as well as deathless (95b8–c1). And he seeks this demonstration, as Socrates, going somewhat beyond what Cebes had actually said, suggests, on the assumption that it is something that can be achieved by human beings (compare 95b8–e2 with 88a10–b8). Indeed, Cebes goes so far as to hope that Socrates, in particular, is in possession of the demonstration himself and, moreover, able to impart it to others (95a7–b4; as does Simmias: 63c8–d3). But, having said that, as Socrates' first recapitulation would have it, the truth about the immortality of the soul is, in Cebes' view, "unclear to everyone," including Socrates (91d2–9). Besides going somewhat beyond what Cebes had actually said once again (compare 91d2–9 with 88a10–b8), Socrates' first recapitulation will eventually part ways with the second on the question of the limits of human knowledge.²² Yet Cebes accepted it, too, as an accurate representation of his objection (91e1)! What is the import of the difference between the two recapitulations and, in the next place, of Cebes' failure to notice it? Looking back, one sees that Cebes' original objection had not made it entirely clear whether he views it as possible or impossible for human beings to grasp the truth about the soul's immortality. And Socrates may have wanted to clear up the ambiguity. Dispensing with the pretense that his recapitulations of the objection are meant to compensate for his own faulty memory (91c7–8ff.), he eventually indicates that they are in fact intended to bring out Cebes' view as accurately as possible (95e2–4). In the event, if Cebes' view was not entirely clear to Socrates from the objection alone, his response to Socrates' recapitulations does serve to clarify it. For

Cebes' failure even to notice the difference between Socrates' two opposed recapitulations implies that his view is, on the whole, somehow well represented by both of them. He *wavers*, in other words, between the one position (that it is possible for human beings to grasp the truth about the soul's immortality) and the other (that it is not); he does not know what the limits of human knowledge are. In this way, the larger question of human knowledge and its limits begins to emerge from the request for knowledge of the soul's immortality. We are not totally unprepared, therefore, for what happens following Socrates' second recapitulation of Cebes' objection.

After silently deliberating for a long time, Socrates says that the demonstration of the soul's immortality, the demonstration Cebes seeks, presupposes a thoroughgoing study of "the cause concerning generation and corruption as a whole" (compare 95e8–96a1 with 95b8–c1). Knowledge of the immortality of the soul presupposes, that is to say, knowledge of the whole world. And this makes sense, as will become clearer later, since what a part of the whole, for example, the human soul, can do or suffer cannot be fully known until the ultimate cause or causes (of it) are fully known. Socrates' very first argument (70c4–72d10) had, in keeping with this, addressed the question of immortality in the context of the larger question of the cause of generation and corruption (70d7–e1, 72a11–d3). As promising as this start was, the treatment of the larger question was far from adequate. Accordingly, if his initial battery of arguments for the soul's immortality did not advance beyond square one, this is perhaps in part because they were not preceded by an adequate treatment of the question that Socrates himself regards as the truly prior one. Now, by way of illustrating what the asking of that prior question really involves, Socrates goes on to give his intellectual autobiography, which is an account of his own experience asking it (95e8–96a3).²³ And so the most obvious, but not the only, reason for the intellectual autobiography's place in the *Phaedo* is this: full knowledge of death presupposes full knowledge of the whole.

Chapter 2



What Is Science?

The Young Socrates' Motives

As a young man, Socrates was merely carrying on a long-standing tradition of reflection. For he was wonderfully desirous of that wisdom called, already, “inquiry concerning nature” (96a5–7, compare *Laws* 891b8–c9), which is said to go back to Thales.¹ He desired this wisdom² or this natural science, as we may also call it, as wonderfully as he did not for its own sake but because (96a7) of his opinion that it was “magnificent” or “overweening” to possess it, that is, to know the causes of each thing. Still, the young Socrates’ desire to know cannot be reduced altogether to this opinion, which stems from a desire on his part for something other than knowledge.³ His desire to know was indeed, at the outset, complicated or adulterated by the admixture of another desire, a desire for whatever was magnificent in his opinion. But had it not happened to seem magnificent to him to possess it, the young Socrates might still have desired such knowledge (on its own account), only not so wonderfully. That is to say, his unadulterated desire to know would perhaps be unencumbered by wonder. And Socrates’ well-known suggestion in the *Theaetetus*, that “this experience, wondering, belongs very much to the philosopher,” supports this. “For,” he goes on to say, by way of qualification, “there is no other *beginning* of philosophy than this” (155d2–4).⁴

The Uncertainty of Natural Science

Socrates goes on to cast light on the sort of things he used to examine as a result of his wonderful desire to acquire natural science by citing three or four examples. Before doing so, however, he gives the first of many indications that natural science is not free from difficulties. For the way in which he “frequently threw himself back and forth” in the course of the examinations he undertook in order to acquire it suggests that the results of those examinations fell somewhat short, at the very least, of complete certainty (compare 96a9–b1 with 90b9–c6). At most, inasmuch as their results evidently fell short of such certainty as would be incompatible with any ongoing vacillation or wavering in their regard, the examinations themselves could well appear Sisyphean. Among other things, the young Socrates vacillated or wavered as to whether it is “blood” or “air” or “fire” by means of which human beings think (96b4), or even whether it is “none of these things, but the brain” from which knowledge comes to be (96b4–5). His wavering or disagreement with himself on these matters as well as others foreshadows the fact that while all natural scientists believe there is “an Atlas”—a fixed and necessary being (108e5–109a2, 99b8) at the bottom of all things, a being they believe they will discover at some time (99c1–6)—they disagree with one another (within certain limits: 99c1–3) about what that being is, for instance, whether it is “vortex” (99b7) or “air” (99b8). For some reason, the natural scientists seem to be unable to reach a consensus. Could it be that the ultimate subject matter of natural science—defined provisionally as the cause or causes of generation and corruption (compare 95e10 with 96a8–9)—cannot in the last analysis be known with complete certainty? And if that knowledge remains uncertain or tentative, could it be that it remains exposed to endless revision or disagreement as well?

However that may be, the young Socrates’ vacillation as to the nature of the body (“blood” or “air” or “fire”) responsible for thought or knowledge in human beings (96b4) was very different from his wavering as to whether what was responsible for this was in fact “none of these things,

but the brain" (96b4–5). For his wavering pertained in the first case to the nature of the matter ("blood" or "air" or "fire") by virtue of which the compounds made out of it ("we [human beings]") acquire a characteristic or power of their very own ("who are thoughtful"). In the second case, however, he vacillated as to this: whether that matter—whatever its nature or form may be—which gives to the compounds made out of it (human beings) some characteristic or power of their very own (thought or knowledge) is to be regarded as a whole in its own right (as "the brain" is); or whether, insofar as it is the matter (that is, "the blood") of the very matter in question ("the brain") that does this, that matter too ("the brain") is to be regarded as a mere compound.

These examples of the two kinds of vacillation or wavering that Socrates was liable to as a young natural scientist, the only ones he specifies here, have far-reaching implications. Indeed, if they did not have sources embedded in natural science itself they would have no place here. Still, it remains to be seen what those might be. It will have to suffice for now to assert, and as we proceed to bear the possibility in mind, that while the first kind of vacillation will prove to stem from one of the difficulties that eventually made Socrates turn away from natural science, the second will prove to stem from another difficulty.

Natural Science at a Glance

After having cast a shadow of doubt over the possibility of natural science, Socrates gives a brief report of the makeup of the examinations entailed by it. But in keeping with the fact that their results remained uncertain or merely tentative, Socrates presents those examinations in the form of unanswered questions. What he says to begin with is that as a young natural scientist he examined "first" (96b1) the cause or causes through which animals come to be in general (96b2–3), and through which thoughtfulness (96b4) or knowledge (96b5–9) comes to be in human beings in particular. He expected to find the cause or causes

which organize the animals, in all their complexity, in a specific blend of nonliving things or bodies (“some putrefaction”), on one hand, and the mindless changes or motions to which they are subject (“the hot and the cold”), on the other. As for how human beings, alone of all animals, come to be thoughtful, he expected to find the cause or causes of this in one or another simple body or matter (“blood” or “air” or “fire”). But as an alternative to this (96b4–5) he wondered whether it was not in fact some other more complex body or matter out of which our thought or knowledge comes into being (“the brain”). Then or “in turn,” after having examined in this manner the coming to be of these things, the young Socrates examined their perishing, too, presumably into the very matter from which they originally came to be (96b9). Finally, as if by the way, he adds that he examined the qualities of heaven and earth too (96b9–c1).

And with that addition, the objects of the young Socrates’ examinations, as he presents them here, fall into a certain order. Animals in general and human beings in particular depend on heaven and earth, which must be there before the former can come to be and which may perhaps remain even after they perish (*Laws* 889b1–d4). If the young Socrates examined each thing in light of its roots, and the roots of each thing in light of its roots, and so on, he would have been naturally led in the end from the examination of the coming to be and perishing of animals and human beings to the examination of heaven and earth. As the comprehensive and perhaps eternal order within which those transitory things come and go, heaven and earth would have soon become the favored objects of a young natural scientist’s examinations. And yet, precisely if this is so, the fact that Socrates gives to the favored objects of his youthful examinations such slight attention here must come as a surprise. But his reserve is clarified by and it clarifies in turn exactly what it was that, as a young natural scientist, he thought about the roots of (the qualities of) heaven and earth. For reserve would have been called for if Socrates, in his youth, thought such things about the whole or its roots as were at odds with piety.⁵ And had the young Socrates ascribed to the roots of heaven and earth the same soulless, mindless, or “Epimethean”

(*Protagoras* 320c6ff., 361c2–d5) character he evidently ascribed to everything else—including even “soul” itself (96b4, 96b5–9)⁶—would his outlook not have been an impious one?⁷ How can blind necessities (108e5–109a2) such as “vortex” (99b7) or “air” (99b8) truly replace Zeus as “king”?⁸ Now, Socrates has already admitted, in effect, that the impression he gave at his trial, that is, that he was never, “ever” engaged in natural science, was a misleading one (*Apology* 19a8–d6). But has the report of his engagement with it that he allows himself to give here not also served to corroborate or confirm Meletus’ allegation that at some point in the past, if not also at present, he did not believe that the sun and the moon are gods but rather that the sun is stone and the moon is earth (*Apology* 26d1–e3)?

Be that as it may, was not the long-standing tradition of reflection, “which they call inquiry concerning nature,” that the young Socrates was, for a time, only carrying on without modification itself vulnerable to this allegation? Socrates himself was fully aware that it was widely believed at any rate that all who philosophize, or who investigate “the things aloft and under the earth,” do not believe in gods (*Apology* 18b4–c4, 23d2–7, 26d1–9). He even seems to have believed this of “the wise” himself (*Phaedrus* 229b4–d1, compare *Apology* 18b4–c4 as well as *Phaedo* 61b2–7 and *Euthyphro* 6a7–10)! The Athenian stranger in Plato’s *Laws* speaks of these matters more openly perhaps but also, to compensate for this, more harshly. To all those engaged in “investigations concerning nature,” he attributes disbelief (*Laws* 891c7–d3), as well as the conviction that the earth, sun, moon, and stars are not gods and divine things but rather “earth and stones, incapable of thinking about human affairs” (*Laws* 886d1–e2, 889b1–e5).⁹ He even goes so far as to say that “everything that moves in heaven and that appears to the eyes appeared to [those who philosophize] to be full of stones and earth and many other soulless bodies, which provided the causes of the entire cosmos,” and that these things “caused many varieties of atheism and other disgusting views to infect such men” (*Laws* 967c2–d7). Whether those who philosophize warrant this objection, assuming that it is in fact an objection, is not yet certain.

But, if they do, some light would be cast on Socrates' earlier remark to the effect that as a young man he was attracted to natural science at least in part because it seemed to him "magnificent" to possess it.¹⁰

The Certainty of Natural Science

It was not because natural science ceased to seem "magnificent" to him that Socrates finally turned away from it. Nor did he turn away from it because the results of his examinations were still compatible with ongoing vacillation or wavering on his part. In the absence of a necessary reason for it, that fact alone is neutral as to whether despair or hope of progressing in natural science is the appropriate response. And as much as he may have vacillated or wavered in regard to the results or findings of natural science, the young Socrates still supposed that what was disclosed by "this (sort of) examination" (96c2, c5) or "this way of proceeding" or "method" (97b5–6) was truly knowledge. For this reason, Socrates' "sufficient proof" of his incapacity for natural science consists in a demonstration that he was so blinded by "examining" matters in this way that he "unlearned" "what [he] clearly knew," at least in his opinion and in the opinion of "the others"—but not of "everybody" (contrast 96c8)—"before" (96c3–7).

The character of "what [he] clearly knew before" or "what [he] supposed [he] knew before this" (96c6–7), when he was a young natural scientist, becomes clearer from the sequel. For before being blinded Socrates supposed he knew "both about many other things and about through what a human being grows" (96c7–8). That is to say, he supposed he knew "through what" (*dia ti*) a human being grows, and he supposed he knew the same thing about many other things as well; namely, "through what" they grow or come to be. And Socrates was not alone in supposing he knew such things. "The others" (96c4) engaged in natural science, such as those who said that the organization of animals was due to the hot and the cold undergoing some putrefaction (96b3), were also

of the opinion that they possessed this knowledge (cf. 99b4–c6, 96a5–7, 99b4–c6). It was, then, *this* examination or the pursuit of *this* knowledge that blinded Socrates. And it was accordingly this knowledge, which he supposed he possessed “before this,” that he unlearned on account of the blindness brought on by his further pursuit of it.¹¹ In keeping with this, the young Socrates did indeed learn something from this experience. He learned that he did not in the last analysis truly possess the sort of knowledge, knowledge of “through what” things come to be, he formerly supposed he possessed.¹² But the unlearning of false things is a type of learning.

Before being interrupted by Cebes (96e5), Socrates is able to make two statements about the sort of knowledge he formerly supposed he possessed. In both of these statements Socrates gives some account of what, in his youth, he supposed constituted sufficient or genuine knowledge of “through what” things come to be. He does not do so in a general way, however. Rather, he takes up five things or processes in particular—one in his first statement (96c8–d6) and four in his second (96d8–e4)—and he presents what he formerly supposed he knew about them. In this way, Socrates leaves it up to his listeners to gather what he supposed he knew about coming to be as such from what he supposed he knew about the specific examples he permits himself to mention. It is imperative for this reason that we remain attentive to the contribution that the young Socrates’ account of these things or processes is meant to make to our understanding of what he supposed he knew, but did not, about coming to be in general.

The Complex Relation Between Science and Common Sense

Socrates’ first statement (96c8–d7) is devoted to spelling out what, in his youth, he supposed he knew about “through what” a human being grows. This knowledge, which he later unlearned, was preceded by another sort of knowledge. In fact, the account he goes on to supply of human growth

(96c8–d6), an account that was perfectly acceptable to the young Socrates and also “to the others” engaged in natural science (96c4), evidently had as its presupposition or starting-point an acceptance of what is clear “to everyone” already (96c8–9). The account of human growth supplied by the natural scientists is presented here as an explanation of what is clear “to everyone” (cf. 97c7, 96a8–9) even prior to a scientific account of it. A human being grows “through” eating and drinking (96c8–9). It is this fact, if it is a fact, which does not need science to become manifest to “everyone,” that the scientific account is primarily intended to explain. In other words, the natural scientists supplement or undergird the prescientific awareness of things—of, in this case, the fact *that* a human being grows “through” eating and drinking (cf. 96a8–9, 97c7)—with an account of the causes by virtue of which what “everyone” is already, prescientifically aware of, necessarily occurs.

A Scientific Account

The young Socrates explained the fact, of which “everyone” is already aware, that a human being grows “through” eating and drinking as follows. When from out of the food that a human being eats flesh is added to his flesh, bone to his bone, and in this way “by the same account” the “fitting” thing is added to each of his other parts as well, then what was formerly a little heap (bulk) becomes a lot, and so a little human being becomes big (96c9–d5). At the outset, to repeat, “everyone” is aware of the fact that a human being grows “through” eating and drinking. And yet the young Socrates along with the other natural scientists felt a need to explain this, to begin with, by having recourse not merely to “eating” by itself but to the very food a human being eats (96c9–d1). There is a reason for this. In tracing human growth to a mere process or happening, the prescientific view fails to specify or make explicit that *from* or *out of which* (96c9) the increased heap or bulk that belongs to the fully grown human being came to be. As a result, it remains open to—at a minimum,

it has not eliminated—the possibility that something, the increased heap, came to be out of nothing at all. But this possibility is incompatible with the basic requirement or premise of science (philosophy), recognized as such by all of the first philosophers, that nothing can come to be without a cause (Aristotle *Physics* 187a27–29, 32–35, *On Generation and Corruption* 317b29–31).¹³ In order to protect this premise, and science along with it, the young Socrates was forced to begin by making explicit what the prescientific view of human growth had allowed to remain mysterious, that is, that from which the increased heap comes to be. Still, the young Socrates' recourse to “food,” as that out of which the increased heap comes to be, does not yet serve to make his account of human growth an unimpeachably scientific one. As a matter of fact, precisely because it has recourse to “food” as that from which the bigger human being comes to be the account must grapple again with the same old difficulty. For how exactly does one being, that is, a bigger human being, come to be out of another being, that is, food?

Had the young Socrates come to a stop before the prescientific awareness of things, he would have been compelled to recognize that the bigger human being and the food *are* or are genuine wholes (cf. Aristotle *Metaphysics* 1020b6–8, 1022a33–35). And that recognition would have compelled him to concede, in turn, that nothing remains or persists unchanged in the course of human growth. At the same time that the food, in perishing, perishes into the bigger human being, the bigger human being, in coming to be, comes to be out of the food. The very being from which, according to this account, the bigger human being comes to be, therefore perishes or ceases to be altogether. However, if something of the first being out of which the subsequent being comes to be does not somehow remain or persist unchanged *within* that (subsequent being) which has come to be, then the latter could perhaps have come to be out of nothing. That which is, the food, in perishing, could have perished without qualification (into nothing), and that which is not yet, the bigger human being, in coming to be, could have come to be without qualification (out of nothing).

In an effort to avoid making a concession that would ultimately threaten science or its basic premise or requirement, the young Socrates refused to come to a stop before the prescientific awareness of things. He reduced *both* the food *and* the bigger human being to their materials or elements, “flesh” and “bone” and the other body parts, instead (96c9–d1, 98c6–7). And in so doing he refused to recognize what “everyone” is otherwise aware of: that the human being and the food *are* or are genuine wholes.¹⁴ By reducing in this way all the beings subject to the change in question to their common materials or elements, the young Socrates was able to preclude anything from coming to be or perishing without qualification. Insofar as the materials or elements at least neither come into being nor perish without qualification, they may thereby serve, since they are fixed themselves, to set fixed limits on the quality and the degree of the changes to which the perishable beings are subject.

With this step, Socrates seems to conclude the account of human growth he had accepted in his youth. And yet if in fact the account ends here, is not the basic requirement of science—the requirement it was incumbent on the account to meet—still unmet? For what the young Socrates sought, to repeat, was an account of human growth that would meet the requirement that nothing come to be without a cause. And to ensure that nothing could come to be or perish unqualifiedly during the change from the one to the other, he reduced both “food” and “human being” to their materials or elements. But the appeal to the body parts, as things that remain or persist unchanged in the course of human growth, is not yet an appeal to what is imperishable simply. Flesh and bone are themselves perishable; in death, the body and its parts return to the earth from which they came (80c2–d3, 77e1–3). The very same difficulty that first led the young Socrates to reduce food to flesh and bone therefore reappears on the level of his “solution” to it. The mystery that surrounds flesh and bone, as a result of this difficulty, extends in turn to the perishable things (“food” and “human being”) of which they are said to be the materials or elements, undermining the account as a whole.

Still, does not the difficulty that undermines in this way the young

Socrates' account of human growth have a clear solution? It is, in essence, the very same difficulty the young Socrates faced before, in the case of "food" and "human being." In that case, though, he sought to resolve it by appealing to their materials or elements. Yet that "solution" did no more than postpone the difficulty. To reapply it here, to reduce flesh and bone and the other body parts to *their* materials or elements, would likewise serve only as a temporary stopgap. For it would be necessary in the next place to reduce the materials or elements of flesh and bone and the other body parts to *their* materials or elements, and so on. A genuine solution to the difficulty, as opposed to a mere stopgap, could not allow this to go on ad infinitum. An appeal to the body parts will not do. At the same time, however, exactly what would have to characterize the sort of thing that could supply a genuine solution follows clearly enough from the fact that it is the perishability of flesh and bone and the other body parts that undermines the young Socrates' account. In other words, would not the difficulty at issue vanish if, after reducing flesh and bone and the other body parts to their materials or elements, the young Socrates did not stop there but continued to reduce those things to their materials or elements,¹⁵ and so on, until he came at last to the truly elemental, altogether simple material (being) underlying everything else? As long as the changes involved in human growth could be traced back to some first, eternal material, the young Socrates' account of it would seem to be saved.

It would only seem to be saved, however. For an aspect of the original difficulty endures. There remains the possibility that the first, eternal thing is itself capable of radically changing, perhaps through thought or choice, in which case the very thing meant to ensure that Socrates' account would meet the basic requirement of science would in fact do just the opposite. For, since Socrates and the others engaged in natural science refused to separate cause from necessity (97e2, 99b1–6, compare 108e5–109a2 with 99b8),¹⁶ whatever should freely emerge in this way—and, in principle, *anything* could—would come to be without necessity and thus, properly speaking, without a cause. A first, eternal thing that is

itself free or radically changeable would sink rather than save the young Socrates' account. What that account requires therefore is a first material that is fixed or necessary, something which, because it is fixed or necessary, is permanent or eternal as well (cf. Aristotle *Nicomachean Ethics* 1139b22–24ff.).

The foregoing reflections are confirmed by the fact that Socrates will later refer to the discovery of that very material as the objective of the whole class of accounts to which his own account of human growth belongs. For he goes on to say that all natural scientists believed they would discover, “an Atlas stronger and more deathless and better at holding all things together” (99c3–5) than any thinking or purposive being (99c1–3, 99c5–6).¹⁷ They believed they would discover, to put it less poetically, a “necessity” such as “vortex” or “air” at the bottom of all things (compare 99c3–5 with 99b6–c1 and 108e5–109a2).¹⁸ On reflection, then, the difficulty with the young Socrates' account has a clear solution, and that solution is, as it turns out, the same as the objective of all such accounts, as Socrates will go on to describe that objective, namely, the discovery of some first, necessary, and thus eternal being (or beings).¹⁹ According to Aristotle, too, the belief or assumption that there was just such a thing was shared by *all* natural scientists (*Physics* 187a35–b1, *Metaphysics* 984a31–33).²⁰

In sum, the young Socrates' account seems, at first glance, to be undermined by a difficulty that, despite being rather obvious, he appears not to notice. On the other hand, he had only just faced it in another context (in the case of “food” and “human being”). Moreover, as we saw, the difficulty has a clear solution. That solution was, on reflection, actually implied by the thrust of the young Socrates' account, or by its overarching goal: to meet the basic requirement of science. In addition to this, it was made explicit by Socrates' later disclosure that what was sought (as a way of meeting that requirement) by his account or by the whole class of accounts to which his own belonged was the fundamental material that underlies and upholds the rest. The difficulty with the young Socrates' account of human growth has a solution, which Socrates, in his

restatement of it to Cebes and the others, merely refuses to state openly, even though he is fully aware of it. If that account in its current state appears deficient, as indeed it does, it is only because Socrates in restating it now refuses to finish it or to draw the conclusion that necessarily follows from it. In particular, he refuses to do more than allude to that account's ultimate reliance on some first material necessity (*anangkē*).

Socrates' Reticence

But what is the reason for this refusal? Although Socrates refuses to speak of that material here—while he is in the midst of conceding that he was, after all, involved in natural science, whose objective is to find it—he is much less reticent in this regard later (99c3–5), after having encouraged his listeners to pardon or to forget his own ties to natural science by critiquing at length those still engaged in it (98b7–99c3). Only after thoroughly dissociating himself from the natural scientists does Socrates permit himself to speak of the sort of thing they seek to discover. Even then, he does not speak of it straightforwardly, but in terms borrowed from poetry or myth, as “an Atlas.”²¹ By speaking of it in this way, he conceals somewhat the very thing that at the same time he allows himself to reveal: that this fundamental material, so far from being thoughtful or purposeful, operates according to necessity alone (compare 99c1–6 with 99b6–c1, 98b7–d8, 96b2–c1, and 108e5–109a2).²² As we saw, in order to meet the basic requirement of science, the natural scientists assumed that there is some first, necessary, and thus eternal material (such as “air” or the atom), or what Socrates calls “an Atlas.”²³ Again, according to Aristotle, all natural scientists made this same assumption. They did not refer to that material as “an Atlas,” however, they called it “nature.”²⁴ And so Aristotle for his part called the first philosophers “those who discoursed on nature.”²⁵

Now, Socrates says that the natural scientists “believe” (99c3) that they will “discover” or “find” (99c5) nature. He implies by this

formulation that, as we have already seen, the belief or assumption that there is nature lies at the basis of natural science. At the same time, he implies that another belief or assumption lies at its basis along with it: namely, that nature, insofar as it can be discovered or found at all, is itself intelligible or knowable (cf. 99b2–c1). The natural scientists believe or assume, in other words, that the belief or assumption underlying natural science, that there is nature, can receive confirmation from natural science itself. And the confirmation of that assumption is the objective and also, simultaneously, the condition of natural science. Having said that, perhaps the delicacy with which Socrates speaks of nature follows from what is gradually becoming clear about it, on one hand, together with what was popularly believed about the first thing, on the other.

Indeed, not only is the assumption that there is nature incompatible with the belief in the gods of the city, its confirmation, which is nothing less than the objective and condition of natural science, would amount to a demonstration of the nonexistence of such gods.²⁶ To see this it suffices to consider the assumption of the natural scientists, that there is nature, in light of the basic alternative to it. Hesiod, for instance, claims that, “first of all things, Chaos came to be,” followed by the coming to be of Earth, Tartarus, and Eros. Yet, despite claiming that they “came to be,” Hesiod does not make the claim that these beings came to be out of or from anything else, as he does in the case of the succeeding generations or births.²⁷ Even then, he says of these succeeding beings that, though they need not have come into being, they can never perish, from which it follows that they have not, strictly speaking, come to be out of anything else. And if in fact something can come to be from nothing, as Hesiod suggests, then there are no fixed limits to what can and cannot occur. Anything would be possible, no matter how incredible. A dog might come to be from a horse, out of which, in the next place, a calf might come to be.²⁸ An immortal might even come to be from a (mortal) human being.²⁹ As long as the cause—if it can, properly speaking, be called a cause at all—of coming to be and perishing remains free or unlimited and therefore shrouded in darkness,³⁰ not one of the beings, each

of which is contingent on it, could be said to have fixed characteristics and powers of its own, or a nature. Should the assumption that there is nature—in the sense of a first material necessity—be unable to be confirmed, science, being the attempt to know the natures of the beings, would seem to be fatally flawed.³¹ For it would seem to depend in that case on nothing but the belief or assumption that there is nature, and is not such dependence (on mere belief) fatal to science or philosophy (cf. 84a7–b1, *Crito* 46b4–6)?

By overturning nature in this way, Hesiod's claim undermines the hope that human beings might obtain by themselves genuine knowledge of the world.³² In doing so, however, it nourishes other hopes. For it makes room for beings whose unlimited freedom in thinking and choosing is not merely derivative from that which, being fixed or necessary, lacks thought and choice. Having come to be without a cause, and thus contingent on nothing, such beings could well be immortal. These immortal beings might, insofar as they think, think about human affairs; and, insofar as they act, choose to perform actions in our regard. Moreover, since they are among the first beings, their power over the beings contingent on them could be such that they can do whatever they choose. In making room for beings such as this, whose unlimited freedom in thinking and choosing comprehends, orders or causes all (other) things, Hesiod's claim jettisons science, to be sure. Yet it replaces nature or necessity, on which science seems to depend, with such inscrutable darkness as would allow for providential gods or the gods of the city. The world, being unfathomably deep, may be the work of gods who, in minding our business as well as theirs, make it responsive to our hopes or prayers when they wish it, regardless of any supposedly "natural" or "necessary" limits.³³

Thus, to assume as the natural scientists do that the first thing is necessary or fixed, or that it lacks the freedom to act through thought or choice, is to deny the existence of the gods in whom the city believes. For, assuming that there is nature, all freedom and indeterminacy must be merely derivative from it.³⁴ Moreover, given that they are composed of

some fundamental material, all other things—including what could otherwise appear to be free or animate, such as “gods” or human beings—must be essentially perishable, since they would have causes (elements of which they are composed) that do not support their being except incidentally.³⁵ Put simply, the philosophers and those who believe in the gods of the city regard the same thing, the first thing (or things), as possessing opposite or mutually exclusive attributes—as, that is, being either necessary (“air”) or purposeful (“Zeus”) (cf. *Symposium* 195b7–c5).³⁶ Socrates’ reticence with regard to nature, the ultimate subject matter of natural science (96a7), may be attributed to his mindfulness of this difference, and of the reputation for impiety that philosophy is almost bound to acquire as a result of it. That reputation was not harmless. Because of it, “the many” in Athens and even elsewhere (in oligarchic Thebes) believed that philosophers, such as Socrates and Anaxagoras before him, deserved to die (64a4–b8), and the *Phaedo* makes abundantly clear that they were not unwilling to act on this belief.³⁷ Socrates knew he could not have spoken in plain terms of nature without making the shocking and dangerous admission that philosophers are, as they are widely reputed to be, nonbelievers in the gods of the city. Still, there is another reason why Socrates refuses to acknowledge openly that the account of human growth he accepted in his youth rested ultimately on an appeal to nature. For not only does that refusal protect philosophy’s future in the city, as in fact it did, but it also serves to bring out more fully a crucial feature of the sort of knowledge the young Socrates supposed he possessed.

The Complex Relation Between Science and Common Sense, Revisited

As Socrates put it at the outset, natural science involves knowing the causes “of each thing” (96a8, 97c6–7, 97b4–5). More exactly, according to his elaboration of this remark, it involves knowing “through what” each thing comes to be and perishes and is the way it is (96a8–9). Oddly

enough, however, Socrates' report of his engagement with natural science as a young man does not altogether reflect this. For his report makes clear only this much: that when he was young, he examined "first" (96b1) "through what" things come to be, whereas after this, or "in turn" (96b9), he examined "through what" these same things perish (96b2–c1). He makes no mention, that is, of ever having examined "through what" each thing is the way—or *what*—it is. There can be no question of the young Socrates' somehow forgetting to try to acquire knowledge of the very thing, or one of them, that he himself says he sought to know. In any case, even if he did not undertake a separate examination of (the cause of) the way of being of each thing, he was still persuaded, presumably on the basis of his other examinations, that he knew "through what" a thing is the way it is (97b3–6). The young Socrates did not forget to examine "through what" each thing is what it is then. He merely assumed that in or by examining "through what" each thing comes to be and perishes he was also, at the same time, examining "through what" each thing is what, or the way, it is. We are not entirely unprepared to find this assumption here or to grasp its bearing.

We recall that the young Socrates was led to reduce "human being," for one, to its materials or elements—to those things of which it consists, out of which it comes to be, when it comes to be, and into which it perishes, when it perishes. As it seemed to him, its materials or elements are what somehow cause the coming to be and the perishing of the compound, "human being." And these materials or elements are for their part ultimately reducible to some fundamental material that somehow causes the coming to be and perishing of all things. Socrates' search for this first material nature followed from the basic premise or requirement of science. This objective, the discovery of nature, was taken up then insofar as it formed a part—albeit an apparently indispensable part—of another, larger objective or overarching goal. For the young Socrates' account was intended primarily to grasp the cause of what "everyone" knows in a certain way already. Although it eventually developed into a search for nature in the sense of a first material necessity, the young Socrates' search

for the cause of human growth was from its beginning, and it would remain to its end, a search for the cause responsible for human beings being the way—or *what*—they are.³⁸ Accordingly, he must have assumed that the materials or elements of each thing, as what each thing consists of, comes from, and perishes into, not only accounted for its coming to be and perishing, but, in so doing, supplied its way of being as well. He must have assumed, in short, that the way of being of each thing—what it is, or what it can do as well as suffer (cf. 98a6–7)—having no distinct existence of its own, could be understood adequately in this way, in terms of the whole process of becoming leading up to it.

This is not an assumption that science can dispense with, at least not without putting itself at risk of being wrecked. Indeed, the young Socrates sought the cause of each thing's being the way it is and not otherwise in the causes of its coming to be and perishing in response to the need that emerged from the basic premise of science to trace the characteristics and powers of each thing to something that could ensure, by being fixed itself, their own fixity. Each thing's way of being, if it cannot be traced to such a ground (or to nature, in that sense), cannot necessarily be counted on to possess the fixity that is a prerequisite for full knowledge of it—and, hence, for science or philosophy in the fullest sense—to be possible. Had the young Socrates, together with the others engaged in natural science, refused to make the aforementioned assumption, he would have been compelled to admit that what he primarily seeks to know, what each thing is, cannot be fully known. For in the absence of a ground or cause the characteristics and powers of each thing may admit of being otherwise than they are or appear to be. Inasmuch as this is so, they may not be fixed or necessary (cf. 97e2, 99b1–6). And what is not necessary is not truly knowable.³⁹ If what "everyone" is already, prescientifically aware of concerning human beings cannot be grounded on knowledge of some underlying material, the prescientific awareness of them cannot necessarily be relied on. At any rate, there would not be anything barring human beings from being otherwise than the way they are: a human being could conceivably grow without eating, to say nothing of even more incredible possibilities.

Granted, then, that the assumption in question may well be indispensable to science, it has consequences that even at first blush force one to wonder whether it is not also somehow incompatible with science. By leaving his account of human growth unfinished, Socrates has drawn our attention to these consequences. For natural science relies on nature or some first material necessity. This much we have seen. As we have also seen, however, it appeals to that material both from and for the sake of accounting for what is disclosed by the prescientific awareness of things. And while it appeals to the materials or elements of which each thing consists, and finally to the fundamental material, to account for what (as each thing's being what, or the way, it is) is disclosed by that awareness, that appeal leads in the end to a decisive break with the prescientific awareness of things. For the necessary consequence of the attempt to understand the way of being of each thing in terms of its materials or elements is a refusal to recognize fully (what "everyone" is aware of) that such perishable things *are* or are genuine wholes. Likewise, it follows from this assumption that the fundamental material alone can be said *to be* or to be a genuine whole. In attempting to discover the cause of what is disclosed by the prescientific awareness of things, natural science is therefore led to make an assumption, that the way of being of each thing can be understood in terms of the process leading up to it, which leads in turn to "monism"—that is, to a striking inability to recognize fully the way of being of each thing, the very thing that natural science sought to account for in the first place.

Yet by allowing his account of human growth to remain unfinished Socrates does not make what follows from that assumption explicit. In this way, he stresses the continuity between natural science and the prescientific awareness of things. At the same time, however, precisely because he stresses the continuity between natural science and what "everyone" is already, prescientifically aware of, Socrates ensures that the decisive break with the prescientific awareness of things that natural science culminates in is felt in its full force by those who complete on their own the account that he cut short. And as this break comes to sight, one

must wonder whether natural science is even capable of repairing it, as indeed it must if it is not going to fall short of its own overarching goal: to grasp the cause of each thing's being just the way—or *what*—it is.



In his first statement about the sort of knowledge he supposed he possessed when he was young Socrates has first of all clarified the need that drives science or philosophy to understand the being of each thing in terms of the process leading up to it, a need to which he vigorously responded in his youth. On the other hand, his statement has, in the second place, forced us to wonder whether that need, however indispensable to science it may be, can be satisfied. For the need natural science has to reduce the way of being of each thing to its materials or elements coexists, uneasily it seems, with the need it also has to reconstitute that same way of being out of them again. There was evidently a time when the young Socrates was not yet disappointed by this situation. But what was the source of his confidence, and why was it not well placed, if indeed it was not? The possibility of reconstituting the way of being (of each thing) out of matter is the very issue raised by Socrates' second statement about what he supposed, at least, he knew in his youth.

Chapter 3



The Prospects for Matter in Motion

The Setting

Socrates' first statement (96c8–d7) has shown, to repeat, that when he was young he attempted to understand the way of being of each thing in terms of the process leading up to it. In pointing also to his reasons for making this attempt, it has indicated something of the connection between the basic premise of science and the need for a descent from the surface of things to their bottommost roots. But it has not yet made clear how exactly the young Socrates carried out that attempt or how he went about ascending, in thought, from the roots to the surface of things. We should not be surprised, then, to find him shedding light on this side or aspect of his former approach now, in his second statement (96d8–e4).

Nor should it come as a surprise if in the course of his second statement Socrates points to difficulties with natural science at the same time as he indicates that, as a young natural scientist, he had failed to appreciate them sufficiently. After all, his second statement, taken as a whole, is intended to convey “what [he] supposed [he] knew before this” (96c6–7), when he was young, but in fact did not. And it so happens that through the four examples he gives here we do at last catch a glimpse of the difficulties in view of which he became disappointed with natural science or unlearned “what [he] supposed [he] knew before.” For what looks at first

glance like a collection of “strange”¹ examples of what Socrates supposed he knew in his youth reveals itself on closer inspection to be the bare bones or outline of a comprehensive reflection, remarkable for its unobtrusiveness as well as its precision, concerning what an element or material is. And after being fleshed out, that reflection serves to call into question the two central (corresponding) beliefs that are held, unavoidably, by all natural scientists—that “an Atlas” can in fact be discovered or known, and that the way of being of each thing can be understood adequately in terms of the motion of its materials or elements, or the whole process of becoming leading up to it. For this reason, by shedding light on how exactly he attempted to ascend (in the manner of natural science) from the roots to the surface of things, Socrates’ second statement also affords us, inasmuch as that attempt was not free from difficulties, a glimpse into what made him turn away from natural science.

Still, it is only a glimpse. Making matters worse, it is as much as we ever see first hand of Socrates’ disappointment with natural science. For the “sufficient proof” of Socrates’ incapacity for natural science that we were promised by him—the “proof” to which both his first and second statements are merely preliminary contributions—is not in fact forthcoming. After his second statement, he is interrupted by Cebes (96e5). And, strangely enough, when he has at last concluded the digression that Cebes’ interruption compelled him to undertake (96e6–97b7), he does not, as one would expect, return to the point in his “proof” at which he had left off. Instead, he goes on to report the next stage of his intellectual autobiography, as if he were not in so doing neglecting or refusing to share with his listeners the “sufficient proof” he had just promised them. There is, then, a lacuna at the decisive moment in Socrates’ intellectual autobiography, and Plato has arranged matters in such a way as to draw our attention to this. (Plato’s own motive for being reticent, to the extent that it is not simply the same as the one we have already attributed Socrates, becomes clearer when one observes that prior to being interrupted, Socrates had been about to lay bare the difficulty responsible for his disappointment with natural science. It is true that, had he done so, on

perhaps the most memorable day of his life no less, Socrates would have left posterity with the false and misleading impression that he dishonored this kind of inquiry [*Apology* 19c6–d1, cf. *Symposium* 210c6–d6], a kind of inquiry that is inseparable from, even if not identical to, the kind characteristic of his maturity. Socrates was not unwilling to court this danger later on, however [98b7–99c6]. It is more plausible, then, that Plato's reticence must be traced especially to the reasons he has given elsewhere for refusing to write down such things [*Second Letter* 314b7–c4, *Seventh Letter* 341c4–342a1].) But does this lacuna leave us at a complete loss?

After wrapping up the digression he was compelled to undertake in response to Cebes' interruption, Socrates unexpectedly turns to the next stage of his intellectual autobiography: his encounter with Anaxagoras. His account of the "wonderful hope" (98b7) or "hopes" (98b3) aroused in him by Anaxagoras' teaching thus replaces the account of his disappointment with natural science that we had expected would be renewed after his digression. And one is tempted to wonder, in view of this substitution, whether the two accounts are connected in some way. Assuming that the young Socrates' disappointment with natural science was due to an increased awareness on his part that it was exposed to a deep-seated difficulty, the hope or hopes subsequently aroused in him by Anaxagoras' teaching might have stemmed from his impression that that teaching in particular was especially well suited to overcome or resolve it.² In that case, the account of what he hoped to learn from Anaxagoras would cast light on the substance of the difficulty responsible for his disappointment with natural science. Combined with the glimpse into the matter afforded by Socrates' second statement, that account might suffice to reconstruct in all essentials the "sufficient proof" we are not permitted to hear first hand in its entirety.

The Problem of "Matter"

In his second statement, Socrates cites four examples of things he no longer (96e6–7, 97b1–6) supposes he knows, but which he supposed he

knew before, when he was young. He thereby adds to his account of human growth four more illustrations of “what,” in his opinion and in the opinion of the other natural scientists, “[he] clearly knew before” or “what [he] supposed [he] knew before,” but later on, as a result of being blinded, unlearned (96c3–7). First, the young Socrates supposed that whenever some big human being should appear standing beside a small one, the former is bigger by virtue of a head—or rather, “by the head itself.”³ Second, he supposed that whenever a big horse should appear standing beside a small one, the former, too, is bigger by virtue of “the head itself.” Third, it seemed to him that ten is more than eight “through” two being added to the latter. Fourth, it seemed to him that two cubits is more than one cubit “through” exceeding the latter by half of itself. These examples are not as strange as they seem—in fact, as we will see, they are not strange at all.⁴

According to the first of his examples, it seemed to the young Socrates that a big human being is bigger than a small one by virtue of “the head itself.” This is an account of the way of being of a human being—or of a human being’s bigness, one of a human being’s characteristics—in terms of its materials or elements. For the human being is here conceived of as a compound, made out of parts, whose way of being (or bigness) in relation to another human being can be traced to what, or how many, materials or elements it consists of.⁵ And Socrates’ second example takes “the head itself” as a part, like his first, but with the difference that the head in question is that of a horse, not a human being, and what is made out of it is, similarly, the way of being (or bigness) that belongs to each of a pair of horses, not human beings. Taken together, Socrates’ first two examples encourage us to notice that the head of a horse and that of a human being, however different from one another they may be in some respects, are the same in others, insofar as both of them are still heads. He therefore suggests, not least by his otherwise inexplicable use of the phrase “the head itself,” that there is a distinction between what is always the same about a head insofar as it is a head, and thus what is shared by each and every head as a head (whether a horse’s or a human being’s), on

one hand, and what about the head admits of change or modification, on the other. To begin to make sense of this distinction, and of the role it plays here, it is necessary to bear in mind that, as the context shows, it is meant to be applied not so much to heads per se as to heads conceived of as materials or elements. For one is led by this to wonder, next, whether this distinction, between what is and is not subject to change or modification, is not somehow applicable to materials or elements as such.

As we saw, what the natural scientists primarily seek to account for is each thing's way of being, or its characteristics and powers. And these things, whose causes they then sought to grasp, are in motion or subject to change. Socrates has already singled out human beings and horses for their changeability (78d10). But if the things natural science is concerned to account for are changeable or perishable, must not their cause or causes be perishable as well, at least in part? To leave it at saying, as we have so far, that the material sought by the natural scientists is simply imperishable or unchangeable will not suffice; it is necessary to add that this material, too, admits of change or modification in some respects, even as it remains always the same in others.⁶ For otherwise, if it did not change, it would not be able to bring about the things, and the changes in the things, as they are already known to us. But does not the presence of change in that material itself also threaten to destabilize what, of all things, the natural scientists had regarded as altogether stable?

The young Socrates' lack of awareness of this difficulty—of, in short, the need to ascribe change to what alone, as it seemed to him and the others engaged in natural science, needed to be wholly free from it—is suggested by his appeal to “the head itself” as the material or element of both a human being and a horse. For by having recourse in this way to “the head itself” (in contrast to the head of a human being and to that of a horse, as the case may be) the young Socrates appealed exclusively to what, about the head, is unchangeable. That is, he neglected to appeal in addition or instead to what about the head is subject to change or modification. But a human being could not come to be unless its materials or elements—let us say, in place of “the head itself,” the atoms—undergo

some change or modification. Nor could a horse come to be out of those same atoms, unless they undergo a different change or modification. As his appeal to “the head itself” goes to show, however, the young Socrates combined the thought that the fundamental material is what causes all things, such as human beings and horses, with the inconsistent thought that it is itself altogether unchangeable or imperishable. Evidently, he neglected to distinguish clearly between what does and what does not admit of change or modification in the material that, he believed, gives rise to each of the things. And, by blurring this distinction, the young Socrates was led to combine efficacy *and* stability such that the appeal to matter could seemingly at least satisfy both needs at once.

A clear-sighted recognition of this distinction would, on the other hand, call into question the intelligibility that was, as it seemed to the young Socrates, integral to the fundamental matter. In so doing, it would constitute a challenge to one of the two central assumptions on which natural science depends: that “an Atlas” can be discovered or known. For that recognition would have forced the young Socrates to ask, next, what further cause gives rise to—and, in giving rise to, places limits on—the changes or motions to which that material is subject. The changes in that material cannot be limited or fixed as the changes in what is made out of it may be: by virtue of *its* materials or elements, that is. By definition, that material has none. But what, then, is the source of (its) motion or change? “Through what does this come about, and what is the cause?” (Aristotle *Metaphysics* 984a21).

With this question, the natural scientists’ search for “an Atlas” comes full circle.⁷ Carried by its own inner momentum, it has found itself face to face with the very same difficulty that at the outset led the young Socrates, in his account of human growth, to reduce flesh and bone—and, indeed, all things—to some “truly elemental, altogether simple material.” That “truly elemental, altogether simple material” has itself succumbed to the difficulty it was called upon, as a last resort, to dispose of. But to escape from it now is impossible (Maimonides *Guide of the Perplexed* II.19). With the source of (its) motion or change shrouded in such

darkness as this, it cannot be known that, much less what, the fundamental material always is. And so is not the world—whose “cause,” to put it loosely, it is—as unreceptive to the human desire to know as it is reassuring to those who, in keeping with the alternative Hesiod represents, do not so much wish to know as to wonder and hope?

The natural scientists’ assumption or belief that they will “at some time” reach their objective (99c4)—their confidence, that is, in their enterprise as a whole—is sustainable only to the extent that they conceive it confusedly. Their ignorance of their objective lies at the bottom of the vacillation or wavering to which, as we have already seen, they are liable in regard to the nature of the material they seek.

The Primacy of Form

So far Socrates’ second statement has shown that in order to bring about the things, and the changes in the things, as they are already known to us, the fundamental material or being must be changeable in addition, perhaps, to being unchangeable. And to draw this distinction means to acknowledge the possibility that what it is ascribed to is not altogether simple; in the last analysis, even the fundamental materials or elements might not be wholly free from complexity or *truly* elemental. What we may call the problem of “matter” is clear. Less clear perhaps is the fact that as a necessary consequence of drawing this distinction on the plane of the materials or elements a corresponding distinction emerges, in turn, on the plane of the things made out of them. For, on one hand, the materials or elements—the atoms, let us say—cause the way of being of each thing only by undergoing the different changes—the combinations and separations, let us say—to which they are subject. Neither a human being nor a horse, to say it again, could come to be unless the (same) atoms out of which they are both made undergo some (different) change. On the other hand, it is not only the changes to which they are subject but also the atoms themselves, so far as they are unchangeable, that all

things collectively are made out of. All things are subject to a distinction that corresponds to the distinction to which their materials or elements, too, are subject. For although all things are caused in part by what always stays the same about the atoms, if there are atoms, each thing is also caused in part by a distinctive modification of them. And so it would make sense if Socrates' last two examples were to pick up precisely where his first two left off: by calling attention to *this* distinction.

Socrates goes on to report that, as a young natural scientist, he supposed he knew, but later unlearned, that ten is more than eight "through" two being added to it and, in the next place, that two cubits is more than one cubit "through" exceeding it by half of itself. These examples prove to follow closely on the heels of the ones pertaining to "the head itself." For to assume, as the young Socrates did, that ten is bigger than eight "through" two being added to it is to treat two as the material or element that accounts for the way of being of ten—or for ten's bigness, one of ten's characteristics. And it is in turn to treat ten and eight as compounds, made out of parts, whose ways of being (or bigness) in relation to one another stem from what, or how many, materials or elements they consist of. But whereas ten is, on this assumption, conceived of as nothing but five twos and eight as four twos, the material or element common to both compounds, the two, is itself conceived of, *not* as a compound, but rather as a one or a whole. (The materials or elements in terms of which the compounds are to be understood are not themselves understood, in other words, as the compounds are, in terms of *their* materials or elements, but as being just what, or the way, they are.) It is said in the sequel, however, that two cubits also seemed to the young Socrates to be more than one cubit "through" exceeding the latter by half of itself. And that means two was conceived of by him, just then at least, *not* as a one or a whole, but rather as a compound, consisting of materials or elements (two ones) of its own.

These examples of "what [Socrates] supposed [he] knew before this" have called attention to a distinction, as we foresaw they would. At the same time, they have called attention to the fact that, as a young natural

scientist, he failed to grasp it clearly. He addressed “the two” conceived of *both* as a compound *and* as a one or a whole as one and the same thing.⁸ But there is a difference here, one he himself could not help acknowledging at times. For two’s factors or parts, its ones, *apart* are not yet two. Two is its parts *together*. As such, it is not (two) ones—it is just two (once), and nothing more (Aristotle *Metaphysics* 1020b6–8). Despite this, the young Socrates “supposed [he] knew” that, since two (once) is the same as its (two) ones, it acquires its twoness—or its bigness, one of its characteristics—“through” them. Was “what [he] supposed [he] knew” not dependent then on his failure to grasp clearly the very distinction that his presentation of that “knowledge” here has just encouraged us to draw?

While that may be, the young Socrates’ inexactness about number, though notable in its way, could be said to be neither here nor there. And rightly so perhaps, were it not for this. As the context shows, the distinction at issue here—between the number two and its parts—embodies the distinction between the way of being, or the form, of each thing and what, as its matter, underlies it. What is therefore indicated by the fact that the young Socrates blurred the distinction between two and its parts is that he blurred the distinction between the way of being or form and matter generally. Had he not done so, would one of the two central assumptions on which natural science depends—namely, that the way of being or form of each thing is supplied by its matter—not have lost the intelligibility it was believed by him to possess?

That assumption, we recall, had as its necessary consequence the view that form is reducible to matter or that somehow something’s form is, or is the same as, its matter. It implied, in other words, the very refusal to recognize fully the way in which form has a distinct existence of its own that we earlier found so striking. It lost sight of the fact that something’s form is not, or is different from, its matter. That the young Socrates insisted on viewing ten (once) as nothing but (five) twos and two (once) as nothing but (two) ones was, it turns out, merely an expression of this assumption. As he has just revealed, however, he could not consistently

maintain this insistence. His view that ten (once) is its (five) twos was contradicted by his view that two (once) is its (two) ones. For each of the (five) twos that ten (once) is reduced to is itself *not* a compound, but is, as two (once), a one or a whole in its own right. As a young natural scientist, then, Socrates must have thought that something's form is, all at once, *both* the same as *and* different from its matter. But what was the unavoidable ground of his confusion?

If that contradiction were merely an accident, it would mean nothing to us. Above all, it would leave the assumption now in the balance unscathed. Nor would it have any bearing on natural science. Yet the young Socrates had appealed to two's materials or elements, all along, in order to understand (the cause of) its form. And he could hardly avoid recognizing what, from beginning to end, it was his primary intention to explain. The contradiction into which the young Socrates was led had its ground then in the very assumption under scrutiny here: that the form of each thing can, as the natural scientists believed, be understood in terms of its materials or elements. For that assumption calls, on one hand, for a reduction of form to matter. But it does so, on the other hand, primarily for the sake of reconstituting or understanding the form of each thing, as it is already known to us. It intransigently continues to recognize, then, both as its presupposition or starting-point and as its target or overarching goal, what "everyone" else recognizes, too: the form, as distinct from the matter, of each thing.⁹ And the young Socrates' vacillation or wavering as to whether it is "the brain" or, rather, "blood" or "air" or "fire" that gives rise to thought or knowledge stems from this confusion.

Still, not only does natural science lose its intelligibility in light of the specific clarity regarding form's difference from matter toward which Socrates' examples have been steering us. Besides being riven by contradiction, natural science now appears constrained to yield only incomplete accounts—if, indeed, they can be called accounts at all—of what it sets out to account for.¹⁰ For given that form must be distinguished from matter, the attempt to grasp a being as what it is in terms of its matter

comes to sight as Sisyphian, indeed, “tragic” (*Meno* 76e3–4). After all, its matter is other than it. As we saw in passing, the matter out of which a being comes to be is a being formed in its own right, but it is a different being. Accordingly, an account of a being’s matter remains almost completely “blind” (96c6) or indifferent to the being itself. And what the natural scientists have to offer is for this reason too only an incomplete explanation or a not an explanation at all.¹¹

Natural science, it turns out, presupposes what “everyone” is already, prescientifically aware of: the form of each thing. But not only does it rest on presuppositions as perishable and hence fragile as that; it also contradicts what it presupposes—which is just to say, it contradicts itself. For it also refuses to recognize the form fully, in its distinctness from matter. Moreover, insofar as what it presupposes is nothing other than that which it regards as its overarching goal to explain, natural science cannot but be, by its very being, incomplete. Its primary subject matter is, despite or because of its best efforts to explain it, unrecognizable to it. In the face of this, must natural science not dispense with the very assumption without which science itself is exposed to the risk of being wrecked—at least if it is not to overreach or become dogmatic, and, in so doing, cease to be science?

Form and Matter

From Socrates’ treatment of “the head itself” it followed that a distinction had to be drawn between (the first) material’s changing and unchanging characteristics. That distinction implied, in turn, what we called the problem of “matter.” From there, another distinction had to be drawn on the level of the things as they are known to us already; this came to sight in the course of Socrates’ treatment of “the two” as the distinction between form and matter. And it had the effect of showing that what, or the way, a being is cannot be fully accounted for by its material. These distinctions correspond to one another. Form is some material—the atoms,

let us say—in the grip of a change or modification of a certain sort. For instance, two is something over and above its parts or its ones; it is its parts in their togetherness. Likewise, a fully formed horse is not the same as its atoms, but is rather the togetherness, of a certain sort, of its atoms. And it follows on the other side that the parts of a being—of a two, for instance, or of a horse—or its atoms apart, are perhaps potentially that being, but *not* actually. Actually, they are informed beings in their own right. Matter, for its part, is a condition rather than a cause. For it is just what, as an informed being itself, can also come to be something else, of another sort, by virtue of some potential or power (to change or move, in a certain way) that it has as the kind of being it is. “Molière explanation” may indeed belong in comedy, as Nietzsche suggests, but—Socrates would add—especially because natural scientists in every age boast, laughably, of having escaped it (cf. 70b10–c3).¹²

Both pairs of Socrates’ examples have undermined in quick succession the two beliefs or assumptions that came to light in the course of our discussion of Socrates’ first statement as being central to natural science: first, that a material out of which science might reconstitute the beings, can be discovered or known; and, second, that a being can be intelligibly reduced to, or adequately understood in terms of, the process leading up to it.¹³ And with that done, the break between natural science and the prescientific awareness of things, the break in whose shadow we turned to Socrates’ second statement, turns out to be so far from being repairable that it can be known with certainty that it is irreparable.

At some point, Socrates must have come, by means of these reflections, to this conclusion. Still, when the young Socrates was engrossed in them, what were they reflections on? What was their common theme or subject matter? It would appear that in following those reflections so closely we have failed to see the forest for the trees. For the distinctions—between material and motion, on one hand, and form and material, on the other—that prompted the young Socrates’ disappointment with natural science, as they came to be grasped by him with increased clarity or precision, have more in common with one another than we have

indicated so far. Are they not, after all, distinctions between species or kinds of causes (cf. 98a1–2)?

What Is a Cause?

Of the 155 lines from 96a6 to 100a8 (discounting Cebes' remarks at 96d8, 96e5, and 99d3) given over to Socrates' intellectual autobiography, 35 (96a6–e4) are occupied by the account of his engagement with natural science that we have been considering. In the remaining 120 lines, Socrates uses the word “cause” (*aitia* and its variants) no less than 28 times.¹⁴ But so far the word “cause” has been mentioned just once (96a9). Throughout his first and second statements, it is not mentioned at all.¹⁵ In what follows—that is, in the digression he undertakes in response to Cebes' interruption (96e6–97b7)—Socrates conveys his current or mature view of “what [he] supposed [he] knew before,” but in fact did not, about the very same things taken up in his second (if not also his first) statement. And all of a sudden, though he is merely going over the same ground again, he mentions “cause” repeatedly (96e7, 97a4, 97a7, 97b1). Evidently, Socrates is now preoccupied with what is and what is not a “cause.” And that preoccupation is no less evident in the experiences he has immediately after turning away from natural science: during the rise and fall, in his eyes, of Anaxagoras. Socrates' remarkable silence with regard to “cause” from 96a6–e4 therefore serves to give the impression that his position as a young natural scientist differed from his (more) mature position in that it was, despite being a quest for causes, unresponsive to the question of what a cause is or even unaware of it as such.¹⁶ This difference would also account for the seemingly slight alteration that Socrates' desire to know, or the object of that desire, undergoes in the course of his transition from natural science to Anaxagoras. As a young natural scientist, Socrates desired to know “the causes” of the beings (96a9). But after he turns away from natural science he seeks to know “the cause” of them (97c6, 97d6, 97e1, 99d1). That is to say, the sole mention of “cause”

in the first stage of Socrates' intellectual autobiography is also the sole mention of it anywhere, as his overarching desideratum, in the plural. Socrates breaks his silence with regard to *aitia* only to bring out all the more fully the fact that as a natural scientist he was not yet preoccupied with or even aware of the question of *aitia* as such. After he abandoned natural science, Socrates' grasp of the causes was clear or precise enough for him to yearn for whichever single "kind (*eidos*) of cause" is the truly primary one (cf. 98a1–2, 97c1–4, 99c6–7), but not before.

Light is cast on these indications of the bearing of causality on the young Socrates' turn away from natural science by the explicit criticism advanced by him later on of those still engaged in it. That criticism starts from this. Natural scientists are, as such, unable "to distinguish" (*dielesthai*) between two things: that which is a cause "in reality," on one hand, and that (condition) without which a cause would never be a cause, on the other (99b2–4). By failing "to distinguish" cause from condition, "the many" natural scientists blur the distinction between them. They therefore "appear [to the mature Socrates] as if they are groping about in the dark, since they use another name for [the condition], addressing it as cause" (99b4–6).¹⁷ Socrates does not say a word here about how he came to this conclusion or criticism. But he does not have to. For were the reflections contained in his second statement not sufficient for us to reach it on our own? As we have already had occasion to see, the natural scientists fail to distinguish the material cause, first, from the source or beginning of motion and, then again, from the form or way of being. As a result, they address the so-called material cause mistakenly, as a cause rather than as a condition.¹⁸ Socrates goes on to say here that the inability of the natural scientists to reach a consensus as to the nature or form of the first material cause is due to this very thing (99b6–9).¹⁹ Again, Socrates merely asserts this here. And yet the reflections at the basis of this assertion, too, we have already had occasion to see. At the core of the explicit criticism of natural science that Socrates allows himself to give (that it mistakes conditions for causes) is, then, the contention that those engaged in it fail to grasp the kinds of causes in their distinctness from one another. That contention, or the reasoning that led him to it, was disclosed by him earlier,

in another context: as he was exposing the grounds for his own disappointment with natural science, or as he was giving the “sufficient proof” of his incapacity for it. In his presentation, Socrates has separated his explicit criticism of natural science from the contention or reasoning at its core. And yet the young Socrates’ disappointment with natural science must have been made up, in its entirety, out of both of these things. That is, his disappointment must have been prompted by his increased awareness that, having grasped the causes only obscurely, he himself was vulnerable to the explicit critique leveled here against the others engaged in it: that he mistook conditions for causes. And he realized, therefore, as his grasp of the causes increased in clarity or precision, that he had attributed more explanatory power to the sorts of “causes” he had unselfconsciously appealed to as a natural scientist than was warranted. For they were in fact merely conditions.²⁰

In his commentary on these passages George Grote says that “it would have been a proceeding worthy of Plato’s dialectic, if he had applied to the word Cause the same cross-examining analysis which we have seen him applying to the equally familiar words—Virtue—Courage—Temperance—Friendship, &c.” (1992b, 185). That Plato himself, or his Socrates, considered this “a proceeding worthy of [his] dialectic” cannot be doubted, however. When Socrates finally comes to speak of his current “method,” which is dialectic, he refers by name to one, and only one, subject matter that he considers appropriate for it to address: “cause” (100a6).²¹ We failed previously to attend to the theme or subject matter of the reflections triggered by Socrates’ report of “what [he] supposed [he] knew before.” As it happens, this was not altogether our fault. For what was at stake in those reflections was the question of (the kinds of) cause, the very thing the young Socrates had failed to attend to. And Socrates’ report of his experiences as a young natural scientist brings out this failure by replicating it. But what was being carried out by way of these reflections all along was, in retrospect, the very dialectical, “cross-examining analysis” of cause that Grote hoped Plato would take up.²²



We began our consideration of Socrates' second statement in the expectation that it would afford us a glimpse of the difficulties in view of which he turned away from natural science in his youth. And that expectation was not misplaced. Socrates' examples of "what [he] supposed [he] knew" as a natural scientist were collected by him in such a way as to disclose also the reflections or reasoning on the basis of which he unlearned them. The reasoning thus disclosed amounted, in effect, to a dialectical, "cross-examining analysis" of causality. According to that analysis, the material cause had to be distinguished not only from the source of motion or change but also from form. The contention that these causes are distinct from one another had far-reaching implications. For it followed from this that it is impossible to reduce the formed beings to their materials or to reconstitute those beings out of them again (by setting those materials in motion). And the vacillation or wavering to which the natural scientists, including Socrates, were seen to be liable was shown, therefore, to be inescapable. In the face of these reflections, science itself must have been left reeling in Socrates' eyes. As the primacy of form, in its distinctness from matter, comes more and more to sight so too does its perishability or fragility. And what ground, if any, remains to fortify it? It was at this low point in his lifelong scientific enterprise that Socrates responded with such enthusiasm to Anaxagoras' teaching. His increased awareness of form, or its primacy (irreducibility), was evidently accompanied by a newfound willingness on his part to do what, from the perspective of the natural scientists, was almost unthinkable (99c1–6): to treat "mind" (*nous*) as a cause. To appreciate the reason for this, we must get ahold of what does, in fact, account for form. To that end, we now turn to Socrates' current or mature view of the things taken up by him in his second (if not also his first) statement, as it is conveyed by his digression.

Chapter 4



Noetic Heterogeneity

The Tip of the Iceberg

At this point, Cebes interrupts: “but now,” he asks, “what is your opinion of these things?” (96e5). He thus brings it about that Socrates’ two statements of “what he supposed he knew before” of “these things” are immediately followed by a statement of what his current or mature view of them is. But Socrates goes farther. In an apparent effort to press on with his “proof,” even in the face of Cebes’ interruption, he also advances an account of why he now holds the view of these things that he does. On its face, that account is puzzling. For in the course of answering Cebes’ question about his current view of “these things” Socrates does not simply return to the examples cited by him in the two statements we have considered so far. Instead, he returns exclusively to the last pair—that is, the pair dealing with the makeup of the number two. And yet this does not stop him from drawing on that basis alone a conclusion of such generality as to encompass not only the remaining two or three examples but also the beings altogether: that (according to the “method” of natural science at any rate) he cannot know “through what” a two, *or any other being*, “comes to be or perishes or is (the way it is)” (97b3–6). According to the digression, and the account or argument advanced in it, this is Socrates’ mature view, a view modest in the extreme. But with what right,

if any, does he go so far? How exactly does his argument about the number two lay an adequate basis for a conclusion as sweeping as this?¹

Then again, was not this conclusion, along with an argument for it, implied before this—specifically, in Socrates’ second statement? It already followed from the distinction between the material cause and the source of motion, on one hand, and form, on the other, that it was impossible to understand anything adequately in terms of the process leading up to it. And it turned out in particular that two is, in the last analysis, just two. There is therefore some question as to why Socrates would have recourse to another—apparently, a very different—argument in support of this same conclusion now. But perhaps the argument advanced now, being the only portion or part of Socrates’ “sufficient proof” (of the inadequacy of natural science) that Plato has left out in the open for all to see, is just the tip of the iceberg whose depths we have already to some extent plumbed in our consideration of his second statement? In that case, the argument advanced in the course of the digression would be just a continuation, or another part—smaller, but more visible—of the dialectical analysis of causality implied by his earlier statement. However that may be, the question of the connection between the two arguments cannot be answered, except conjecturally, until it has been shown exactly how Socrates’ argument here, about the number two, might support the sweeping conclusion he draws from it, that no being can be adequately accounted for in terms of the process of becoming leading up to it.

Unqualified and Qualified Becoming

In response to Cebes’ question, Socrates says that he no longer supposes he knows “the cause” concerning any of the things he had just mentioned. That is to say, he no longer supposes he knows the cause responsible for giving to the beings or forms their characteristics or powers—for giving to two, for instance, its bigness or smallness. This “ignorance” of his is due, according to what he says here, to the fact that he does not know,

and does not suppose he knows, the cause through which a two or any other being comes to be.² He tacitly acknowledges by proceeding in this way that without knowledge of the process of becoming that leads up to a being, the question of why it is (formed) the way it is remains an open one. And, returning once more to the number two, Socrates advances an argument on behalf of his ignorance of becoming. The argument has two components. First, Socrates refuses to accept the view that whenever someone adds a one to a one, the one to which it was added (or the one that is added) becomes two (96e6–9; cf. Aristotle *Metaphysics* 1039a9–10). Second, Socrates refuses to accept the view that the one that is added and the one to which it was added become two through the “addition”—literally, the putting next to—of the one to the other (96e9–97a2). That said, while in the remainder of the digression Socrates goes on to argue for his current nonacceptance of the second view (97a2–b3) at some length, he makes no attempt whatsoever to account for his nonacceptance of the first, which he merely asserts here. Why is this?

Had it been the one that, when another one was added to it, became two, the process of becoming leading up to the latter would be mysterious or unfathomable. That one, in becoming two, does not somehow remain or persist within the two. As a result, it could have perished without qualification (into nothing). And the two, for its part, could have come to be without qualification (out of nothing). In retrospect, this view of the coming into being of the number two (96e6–9) is at bottom the very same view on which Socrates nearly ran aground earlier. For it comes down to this: that one being might come to be, spontaneously, from another being—a (bigger) human being, for instance, from food (cf. Aristotle *On Generation and Corruption* 321a29–35).³ But we recall that the young Socrates and the other natural scientists rejected this view already, on the grounds that it threatened science or its basic premise or requirement. And the mature Socrates’ continued nonacceptance of it here is, therefore, not unprecedented. Nor does it stand in need of further explanation.

The same cannot be said for his current nonacceptance of the second

of these two views (96e9–97a2). That view was accepted not only by the young Socrates but by the other natural scientists as well so as to resolve a difficulty that arose from their rejection of the first. For we also recall that the natural scientists were compelled by their rejection of the first view—of, that is, unqualified coming to be or perishing—to accept that coming to be and perishing occurs, when it occurs, only in a qualified sense. In other words, they were compelled by that rejection to understand coming into being and perishing as the motions undergone by some “truly elemental, altogether simple material” that always remains, in its essence at least, free from generation or destruction (Aristotle *Metaphysics* 984a31–33). And the second view mentioned by Socrates here is, in keeping with the role played by the first, tantamount to just this—it is an image of becoming as it appears in the perspective of natural science. For in the eyes of the natural scientists, each of the compound beings, such as “horse” or “human being,” comes to be “through” the motion or coming-together of simple materials, such as atoms or “air.” But this is as much as to say that the one (element) that is added and the one (element) to which it is added, neither of which is perishable, both become (the compound) two “through” their “addition” (96e9–97a2). As Vlastos observes, “the literal meaning of the verb used for addition, *prostithemi* A to B, is literally ‘put A next to B,’” and “this dead metaphor comes alive in the passage, Socrates shifting back and forth from this verb to variant expressions which refer unmistakably to putting objects close to one another, while he denotes the converse operation not by the usual terms for arithmetical subtraction (*aphaeresis*) or division (*diarexis*), but by words which have strong physical evocations: ‘splitting’ (*skisis*, A7; cf. *diaskise*, A6), ‘leading apart’ (*apagetai*, B3), and ‘separating’ (*chorizetai*, B3).⁴ And this observation, combined with Socrates’ indications that all these acts, “which have strong physical evocations,” are accomplished through the agency of “someone” (96e8, 97a6), makes clear that what is meant by “addition” is nothing other than motion. It makes clear at the same time that what is in the balance just now is the status of the source of motion or, to put it differently, the efficient cause.⁵ For the

argument that Socrates advances now against his former view (that two comes to be through the motion, or coming-together, of its ones) is also an account of his nonacceptance of the more general view embodied by it, namely, that each of the beings can be adequately accounted for, as the whole that it is, by recourse to the motion responsible for the coming-together of its parts or elements.

Form and the Efficient Cause

In sum, when Socrates was a young natural scientist he conceived of the two's form—of the togetherness, in one whole, of its parts or ones—as nothing but the motion, “the coming-together,” of its parts or ones. And just as he attributed responsibility for the two's coming into being to “the coming-together” of its parts or ones, he attributed responsibility for its perishing to their “splitting.” And those parts or ones (apart) were themselves conceived by him, in turn, as two's matter. In the meantime, however, he has changed his mind. The argument to which he appeals here, in defense of this change, apparently rests on his “wonder” (97a2). Wonder involves some awareness of ignorance. But Socrates' argument rests on ignorance that is known by him to be such. For when each of the ones it consists in was apart from the other, each was actually one and they were not then two; yet, when they drew near to one another, through the agency of “someone,” this actually became the cause of two's coming to be, “the coming-together” of the ones being put near to one another (97a2–6). On the other hand, however, when “someone” cleaves or splits one, then this, “the splitting,” becomes the cause of two having coming to be (97a6–8). And what the mature Socrates' is knowingly ignorant of is this: how the cause of two coming to be then, “the coming-together,” could itself become the opposite of the cause of two coming to be now, “the splitting,” and still be the cause of two coming to be (97a8–b1).⁶ “For then it was being carried near to one another and each being added to the other, but now it is being carried apart and each being separated from

the other" (97b1–3). Now, Socrates' argument obviously calls our attention to an apparent inconsistency in his former view. As is indicated by the fact that "splitting," too, may qualify from time to time as the efficient cause of two, the young Socrates could not consistently apply "coming-together," or even its opposite, as the efficient cause of two.⁷ Still, what is the ground of or reason for this failure? In the absence of a reason for it, the young Socrates' inconsistent application of the efficient cause is not yet meaningful to us, since its connection to the "method" of natural science remains, perhaps, an unnecessary or inessential one.

It appears on closer inspection that it is not the obvious inconsistency so much as the reason for it—the reason that inconsistency itself, or Socrates' "wonder" at it, calls to our attention—that is the actual target of this portion or part of Socrates' "proof." For the inconsistency merely encourages us to notice that "the coming-together" of two's parts or ones is no more responsible, that is, sufficient, for its coming into being than "the splitting" of them. The two comes to be, by necessity (97e2), "through" neither form of motion. And that means the efficient cause lacks the explanatory power the young Socrates had attributed to it. The efficient cause may well be a condition of the two, but it is not its cause. Form and the efficient cause have, each of them, already been distinguished from the material cause. With this discovery, they are now distinguished from one another. But the young Socrates for his part overlooked, or blurred, this distinction. And it was for this reason that his application of the efficient cause was inconsistent. For to say of what in actual fact (like the two) has a cause distinct from motion that, even so, the cause of it is some motion or other (such as "coming-together") is to invite confusion. Not only are different beings (like ones) bound to come to be from time to time in connection with that same motion ("coming-together"), but that same being (or the two) is bound to come to be from time to time in connection with a different motion (such as "splitting"). And it was for this reason too—which is to say, because he did not grasp these causes, form and the efficient cause, clearly or in their distinctness from each other—that the young Socrates attributed unwarranted explanatory power to the efficient cause.

The young Socrates' inconsistent use of the efficient cause has called our attention to the deeper or more comprehensive difficulty that gives rise to it: as a young natural scientist, he failed to distinguish clearly between form and the efficient cause. And that failure, in turn, has proved to lie behind the fact that he attributed too much explanatory power to the efficient cause. Thus, now that he has in his maturity grasped these causes clearly, he no longer supposes that such motions as "coming-together" or "splitting" can completely—or, consequently, consistently—account for the two. And in this light, the argument advanced by Socrates here, in the digression, has amounted to a continuation of the dialectical analysis of causality that was implied earlier. In the course of that analysis, the true status of the so-called efficient cause has come to sight: along with the material cause, it too must be addressed as a mere condition of the forms rather than a cause. At the same time, something else has come to sight. For in the process of ruling out motion as what accounts for the distinctive togetherness of ones that is two, Socrates' argument has disclosed to us what does in fact account for it: it is not so much motion as *mind* that puts together the two from its parts or ones.⁸

Number, Mind, and Form

Two is a putting together, or a combination, of ones. And, by that very fact, it is separated or set apart from other such combinations, for example, from eight or ten. Socrates' treatment of the two—the first number⁹—has thus shown more generally that a number is not only the combination of its parts or ones but also the separation of that combination itself, taken as a one or a whole in its own right, from other ones like it. And it has shown, more importantly, that these combinations (separations), by whose presence the numbers are formed, must be traced to the role of mind rather than to motions. For mind alone can count or calculate.¹⁰

Now, here too, it almost goes without saying, Socrates has not actually confined his discussion, or its implications, to number; what he says of it

is, once again, also said for the sake of something else. In the last analysis, what is evidently true of number—that its being put together depends on an act of mind—is hardly less true, albeit perhaps less evidently so, of the forms or beings generally.¹¹ And indications that this is the case are not lacking. Above all, there is the fact that from his argument about the number two Socrates does not hesitate to draw a conclusion of such generality as to encompass all of the beings (97b3–6), something he could not do if he did not regard number as a pattern or likeness, of some sort at least, even of the perishable beings. And there is the additional fact, which is not unconnected to this one, that he has already put the number-like character of one such being in particular on display: the human being.

Those features of the young Socrates' scientific account of human growth (96c9–d5), on one hand, and bigness (96d9–e1), on the other, which we lacked the preparation needed to understand when we considered them earlier, were passed over by us in silence. This much we saw: the example that conveyed the young Socrates' account of human bigness also implied, when taken together with the examples subsequent to it, that that account was flawed. In short, whenever some big human being should appear standing beside a small one, the former cannot, as Socrates had formerly supposed, be said to acquire his form—or bigness, one of his characteristics—merely from the materials or elements he is made out of. But we overlooked something. For the very example Socrates selected for this purpose, to suggest how the acquisition of bigness on the part of a human being *cannot* be accounted for, was itself also especially well adapted to put on display how that acquisition *can* be accounted for. Indeed, is it not obvious that the one human being becomes big, and the other small, when the two are put, that is, thought of, together or in relation to one another?¹² And, as the sequel displays plainly enough, does this not go for horses no less than human beings (96e1)?

Aside from being obviously on display here, Socrates later elaborates on the relational character of human bigness at some length (102b3–d4). He goes on to say that there is no bigness whatsoever “in Simmias”

(102b5–6); Simmias does not by nature surpass (another human being) “by virtue of being Simmias” (102c1–2, compare 102c7–8). Instead, Simmias “happens” (102c2) to have bigness, or indeed happens not to have it, depending on the person to whom he is put in relation. When he happens to be related to Socrates, who is smaller than he is, he acquires bigness. But this is by no means to say that Socrates is, in himself, small. For just as Simmias does not surpass Socrates “by virtue of being Simmias,” Socrates is not surpassed by him “because Socrates is Socrates” (102c3–4). Socrates acquires the smallness he has, rather, in much the same way that Simmias for his part acquires the bigness he has: that is, by being put “in relation to” another (102c5, compare 102c8).

If the opening pair of examples of Socrates’ second statement displays the relational character of bigness among perishable beings—which is just to say, the way in which bigness is acquired by them only in the context of some relation—the next pair (96e2–4), which is concerned with “clearer things” than perishable ones (96e1–2), reminds us that this relational or noetic character applies to the bigness of numbers as well. For ten is bigger than eight (96e2–3), or two is bigger than one (96e3–4), for much the same reason that Simmias, for instance, is bigger than Socrates—not only because of the materials or elements ten or two is made out of, but by being put in relation to eight or one (*Theaetetus* 154b6–155c4; 102b3–d4). And, to repeat, only a mind can do this. Still, the number-like character of form is only very partially illustrated by this overlap. For one, the *external* relation (of separation) between two, for example, and eight or ten in light of which they acquire, respectively, their magnitudes is inseparable from the combination, in one whole, of the parts or ones of each of them. For each of these numbers is, internally, not merely a heap of its parts or ones, but a combination of them in a certain ratio or relation. And inasmuch as that internal relation is shared by “half of number” (104a7–b4), the combinations characterized by it qualify for inclusion within a class, that is, the class of even numbers. Despite their relative differences, two, eight, and ten are also—at least as far as the internal relation in which their parts or ones are combined is

concerned—relatively similar. For form to be number-like in this respect, too, it would have to be the case that Simmias and Socrates are for their part recognized or classified as human beings much as eight and ten are classified as evens, namely, by sharing the same *internal* relation. To develop Socrates' picture of form's number-like character farther along these lines, another glance at his youthful account of human growth is called for.

With hindsight, we see that that account reflected the lack of adequate recognition of form that we now know to be a necessary consequence of natural science. For the young Socrates reduced a human being to "a heap" (*ongkos*) of flesh, bone, and the other body parts or materials (96d3). On the other hand, the recognition of form is also, as we now know, unavoidable for natural science. And the young Socrates' account reflected this, too. He could not help acknowledging, that is, that so far from being "a heap" of the body parts, a human being is in fact some ordered arrangement of them (96d3).¹³ And it was disclosed in this manner what, among other things, the prescientific awareness of a human being is actually an awareness or recognition of: some ratio or relation of body parts (cf. Aristotle *Metaphysics* 1020b6–8, 1022a33–35). That internal relation, or the shape, inasmuch as it is shared, qualifies those combinations characterized by it for inclusion within a class, the class of human beings. And it is indeed to be distinguished, for instance, from that internal relation that is shared by all members of the class of horses, another species of animal, in much the same way as evens are to be distinguished from odds, the other half of number.



The argument advanced in the course of Socrates' digression is indeed just another portion or part—smaller, but more visible—of the dialectical analysis of causality implied by his earlier statement. It has shown that a clear-cut distinction must be drawn between form and the efficient cause, and from this it followed that the efficient cause, too, must be addressed

as a mere condition of the forms rather than a cause. But the analysis has disclosed at the same time what, given the right conditions, does account for the forms or beings as we already know them: mind, which orders or relates what is given. Strange as that seemed, some light was cast on this disclosure by the fact, which we earlier passed over in silence, that the number-like or relational or noetic character of the human being, in particular, was already put on display. That said, the similarity between number and being, to which Socrates has alluded, only goes so far. Among other things, there is the difference that the beings, as “everyone” knows them, are perishable or in motion, whereas the numbers are not. In contrast to the numbers, then, an understanding of the motion, or the coming into being and perishing, of the beings or forms remains, as ever, indispensable to a full understanding of them. And yet it is just this, that is, a full understanding of their material and efficient causes, that is lacking. The primacy of form, together with the fact that what accounts for form is some mind’s eye, means that the coming into being and perishing to which the forms are subject can be fully understood if—and only if—a mind is, and is known to be, their orderer or cause. In view of this, it need not come as a surprise that Socrates should now, without further ado, turn to Anaxagoras’ teaching, or to the “wonderful hope” (98b3) or “hopes” (98b7) that were once aroused in him by it. For that teaching must have offered itself to the young Socrates as being especially well suited to overcome or resolve the deep-seated difficulty to which, he had learned, natural science was exposed. In light of what he had learned or, indeed, unlearned about causality during his stint as a natural scientist, the young Socrates would make a last-ditch effort to learn from Anaxagoras the core, at any rate, of what he had desired to know from the outset. As it happens, that effort was unsuccessful. But what was the reason for this failure?

PART II



Chapter 5



Teleology

The Apparent Price of Socrates' Hopefulness

Once, in the wake of his disappointment with natural science, Socrates heard “someone”—he does not tell us who, perhaps because it was Anaxagoras himself (compare *Parmenides* 127b6–c6) or, more probably, his student Archelaus¹—reading from a book that he said was by Anaxagoras. What he heard was this: “in fact mind (*nous*) is both the orderer and the cause of all things” (97b8–c2). Now Socrates goes on to give eloquent, precise articulation to the wonderful hope or hopes that this text, or his view of it, initially aroused in him (97b8–98b6). But his hope or hopes were short-lived. To date, the mature Socrates has been unable to discover “that sort of cause” for himself or to learn it from another (99c6–9). And this loss of confidence in his ability to discover or learn it (contrast 97c6–98b6) is, perhaps, what underlies a corresponding decline in his willingness to try to do so. That decline is indicated above all by the fact that in the course of reading Anaxagoras’ books Socrates was swept away from his initial hope or hopes (98b4–8). For does this not mean, to put it simply, that what his reading disclosed to him was so damaging to the hope or hopes initially aroused in him by “that sort of cause” that he gave them up, or did not even have them anymore? Moreover, he surely made no further efforts in the direction originally suggested to him by

Anaxagoras. Rather, he pieced together another approach of his own (compare 97b6–7 with 99c8–d2).² As it seems, then, what Socrates learned from his reading was evidently compelling enough to undermine his confidence in the possibility of a universal teleology—in the possibility, that is, of comprehending “all things” in terms of the final cause, or “the good” (99c5–6, 98b2–3). And yet what Socrates actually says of that learning, of its makeup, is totally insufficient to account for the powerful effect it evidently had on him. For he says that as he went on with his reading he found that Anaxagoras did not so much as try to work out the teleology he had initially received with such hopefulness—he taught, instead, the very natural science whose central assumptions Socrates had already rejected (98b7–99c6). An account of Socrates’ rejection of natural science (which we have already considered in part) therefore takes the place of an account of his rejection of teleology. But is this not completely beside the point, not to say frivolous? That Anaxagoras did not, for whatever reason, even attempt to carry out the undertaking that had once aroused Socrates’ hope or hopes has no bearing whatsoever on the question of the possibility of that undertaking. That undertaking’s possibility, as well as its desirability, remains safely intact.³ And Socrates must have known this. He was, moreover, unlikely to give up on such frivolous grounds or for no good reason the very hopes that he said he would not give up even for a lot (98b3).⁴ In this situation, what *really* persuaded Socrates to reject teleology, to the extent that he did reject it (contrast 99c6–8 with 97b7)? And what do the frivolous grounds of that rejection that he leaves in the foreground here—whether as a red herring or something else?—have to do with his true ones?

The True Price of Socrates’ Hopefulness

Socrates’ reception of the Anaxagorean text was prepared by what he had learned about the primacy of form, on one hand, and its connection with order and mind, on the other. Thus prepared, he was “pleased by *this*

cause” in general and, as far as its application was concerned, he formed the opinion that it was “in some way” good that mind should be the cause of “all things” in particular (97c2–4, compare 98b8–c1). But that means his receptivity was also, for some reason, attended by some misgivings. For the all-encompassing causality of mind was in Socrates’ opinion good only “in some way” (97c3), which is also to say that it seemed “in some way” not good to him, too.⁵ As pleased as he was by the final cause, then, Socrates’ willingness to accept its application to all things was, perhaps, already limited by some condition or other. And so it would seem, at any rate, that Socrates faced the prospect of rejecting teleology, should it fail to live up to that condition, from the very first. Still, the identity of the condition in question, whose weight for Socrates was apparently so great as to ultimately “make or break” teleology’s standing with him, remains to be seen. To this end, we must take a step back, and place Socrates’ warm reception of teleology within the larger context of science—after all, it was as a continuation of his efforts to reach his overarching goal, or to meet the basic requirement of science, that Socrates took an interest in teleology to begin with.

In so doing, however, we are immediately faced with an obstacle. For to say that a mind causes or orders all things with an eye to what is “best” may, at least, be to say that a god or gods do this. In fact, owing to the presumption that to say the one is just to say the other, if not in so many words, Socrates’ receptivity to teleology is frequently regarded as a receptivity on his part to the possibility “that God created the world to be as good as possible—whether specifically good for human beings or in some other way.”⁶ Teleology comes perilously close to—it may even be the same as—theology. That said, the teleology presented here is by no means anthropocentric, or “specifically good for human beings.” And it is in any case implausible, to say the least, that Socrates’ newfound willingness to treat mind as the cause of all things was accompanied by a corresponding receptivity to theology. The situation must be just the reverse: it must be owing to teleology’s closeness to theology, that is, and thus to the very obstacle that stands in the way of our own attempt to

place Socrates' reception of teleology within the larger context of science, that Socrates had misgivings about it. For although it promised to overcome or resolve the deep-seated difficulty to which, he had learned, natural science is exposed, was not an all-encompassing final cause nevertheless bound to be received by Socrates with some misgivings precisely because of its proximity to the basic alternative to science?

We may recall that the young Socrates, along with the other natural scientists, neither sought to discover a power that positions things in the best way possible, in the way they are now situated, nor did he think that any such power has "divine" or "daimonic" strength (99c1–3).⁷ In deference to science, or to its basic premise or requirement, he refused to bow to the possibility that a cause so weak, so perishable, and so bad at holding all things together—in short, so radically *changeable*—as the purpose of a god, or the final cause, was really what bound or held together the whole (99c3–6). In the meantime, to be sure, he has developed an appreciation for the merely dogmatic character of that deference and refusal. However, this appreciation was not in the last analysis sufficient to persuade him to go so far as to accept such a "divine" power himself—it merely provided him with the incentive, which the natural scientists lacked, to seek with an open mind to come *to know* this power or cause if he could (99c1–9). And this is just what he is doing now, so to speak, before our eyes.

Yet the very effort to seek that cause, to seek to know it, falls within the province of science, not piety. For that cause would not be knowable in the first place, if it were not, as Socrates continued to hope, a necessary cause (97e2). Socrates' objective was still, at its core at least, the same one he had as a natural scientist, too: he wished to know the (necessary) cause or causes concerning the generation and corruption of the beings (compare 97c6–7 with 96a7–9 and 95e10).⁸ In the face of what he recently "unlearned," he merely proposed to shift the burden of responsibility for this from a combination of material and efficient causes to the final cause, or "the good," or mind. And that superhuman mind, he supposed, would somehow accord with, that is, be knowable by, his own merely human

mind (97d5–7).⁹ Besides, Socrates looked toward Anaxagoras as “a teacher,” not a prophet, “of the cause concerning the beings” (97d6–8). In Socrates’ eyes, that is, Anaxagoras’ authority was conditional (*ei*) from the first on his ability to “show by reasoning” or “demonstrate” (*apophainein*) his claims about “the cause” (98a1–2).¹⁰ Hopeful as he was, Socrates was prepared all along to trade his hopes, if not “for a lot,” for knowledge of the truth about them—and, as a result of this, he did not protect his hopes from a potentially damaging investigation, “but” read Anaxagoras’ books as quickly as possible in order “to know” whether they had some basis in truth (98b3–6). It so happened, in the end, that he was unable to know this. And it is precisely to this incapacity—to his incapacity to obtain knowledge “of that sort of cause,” whether by discovering it for himself or by learning it from another—that Socrates now attributes his rejection of the final cause (99c6–9). From start to finish, then, the all-encompassing causality of mind, or of the good, was itself good in Socrates’ opinion only “in some way,” namely, only on the condition that knowledge of “how it works” (99c7) could be obtained in principle by all human beings (79b9–10, 97d1–5). That condition was not met, of course, but why not? With this question, which constitutes an advance in precision over the more general one with which we began, we find ourselves back at the beginning. Let us begin again, then.

A Pair of Ambiguities

Not long after he turned away from natural science, Socrates heard someone who was reading from one of Anaxagoras’ books say, “in fact mind (*nous*) is both the orderer (*diakosmeō*) and the cause (*aitios*) of all things (*panta*)” (97b8–c2). He heard nothing more. But no sooner had he heard this Anaxagorean text being read aloud, a text whose meaning is by no means self-evident, than he began to interpret or unpack it. Socrates’ “interpretation” was inspired by the Anaxagorean text; in repeatedly adding or subtracting something of importance, as we will see presently that

it did, that interpretation was not ministerial to it—the total view of teleology it amounted to was, on the whole, of Socratic origin. This view, the view of teleology Socrates was inspired by the Anaxagorean text to form, is the subject of the account he gives to Cebes here (97b8–98b6). That account has three parts (97b8–d5, 97d6–98a7, and 98a7–b6). But Socrates' view unfolds especially, because it does so gradually or step-by-step, in the first of these.

The first step, we have already had occasion to see: Socrates was pleased by the causality of mind, and he formed the opinion that it was “in some way” good that mind should be the cause of all things (97c2–4). And yet the interpretation on which this first impression of his was based was, by Socrates' own report, not altogether warranted by that text's actual wording. For although he was, he reports, receptive from the beginning to the possibility that mind is a cause (of anything at all), or the cause of all things, this was not the whole of what he had heard. Mind was said to be not only the cause but also “the orderer” of all things. And is there not an essential difference here? Be that as it may for the time being, Socrates compensated for this particular subtraction when he “supposed,” taking a second step, “that if this is the case,” that is, if mind is indeed the cause and orderer of all things, “then mind in ordering orders all things and positions each thing in whatever way may be best” (*beltiston*) (97c4–6). Ordering, whose meaning verges on “positioning” (97c5, 99c1–2) and consequently moving, is now assigned to mind, and this is more in line with the actual wording of the Anaxagorean text. And yet this assignment is made in such a way as to subtract from that text once again. For Socrates chooses to understand mind now as orderer, but he disregards its role as cause; he has replaced, rather than supplemented, the causality of mind with its ordering power. And the fact that he uses “orderer” and “cause” indifferently suggests that he blurred them, or did not yet clearly distinguish them from one another. This is the first ambiguity we must contend with.

Another ambiguity was embedded in Socrates' second step. There, at the same time as he added that mind orders what it orders with a view to

the “best,” he drew, also on his own authority, a distinction between “all things” and “each thing” (97c4–6). And these additions, when they are taken together, serve to render the meaning of “best” ambiguous. “Best” could mean what is best for all things, or for each thing. And the presence of this ambiguity within Socrates’ view suggests that he was not yet aware of the possibility that what is best for all things is not perhaps, simultaneously, best for each (and vice versa) or that he blurred them.

These first steps merely go to show that the distinction between what is best for “each thing” and for “all things” was as ambiguous or unclear to Socrates as the distinction between mind as “orderer” and as “cause.”¹¹ By themselves, that is, they do not shed much, if any, light on the bearing that this pair of ambiguities has on Socrates’ view. For the moment, then, the obscurity produced by these ambiguities simply lays a basis for suspicion, at least, as to whether the hope or hopes aroused in Socrates by the Anaxagorean text—or, rather, by his view of it—are in fact sufficiently coherent or intelligible to survive precise articulation. But this suspicion, which is warranted by other, more obvious features of Socrates’ account as a whole as well, is borne out in what follows.

Teleology in Pieces

Socrates supposed, in the next place, that “if someone might wish to discover the cause concerning each thing, in what way it comes into being or perishes or is (the way it is), it is necessary to discover this concerning it: in what way it is best for it either to be or to suffer something or to do (something)” (97c6–d1). That is to say, he supposed that knowledge of what is “best for [each thing]” is somehow the same as knowledge of the cause of each thing (or, “in what way it comes into being or perishes or is [the way it is]”). Here, in Socrates’ third step, what is “best” is at last rendered unambiguously as what is best “for [each thing]” (97c8), not for “all things.” And this is, in some way, an improvement in clarity. But, on further reflection, this less ambiguous rendering actually serves to bring

out the incoherence that, as we have come to suspect, lurks at the root of the obscurity surrounding Socrates' view.

For to seek what is best for each thing makes sense only in relation to that "thing," whatever it may be. An understanding of what is best for a human being, to give the relevant example, presupposes or points back toward an understanding of that on which the hierarchy of a human being's needs or desires, or the peak of that hierarchy, or the one thing needful for a human being, is ultimately based: its "being (the way it is)," or its form, or its nature.¹² To put this more generally, each of the beings, what it is, is essentially prior to what is best "for it," and therefore what is best "for it" cannot, without incoherence, be addressed as its cause. Yet Socrates did just this; and, in the process, he revealed that he was confused in one way or another. By thinking through what a coherent account would have involved, we may begin to see exactly in what way.

The most that could be said coherently or intelligibly along the lines of what is best for each thing is this: each of the beings, in needing and yearning for what is best for itself, is somehow set in motion toward it. For to address what is best for a being as what moves or positions or orders it would not—whereas addressing it as a cause would—free what is best "for it," incoherently, from its dependence on the nature of the being concerned. Still, despite being intelligible, "best," understood in this way, is just what meets the need of a being that would be incomparably better off if it were not, by nature, in need to begin with. All order, all motion on the part of each of the beings toward what is best for it, would depend for its existence on the ground supplied by something, some being or other, whose nature is not itself dependent on a mind attentive to what is best for it. Not acts of mind, then, but the natures of things—which are themselves less than completely good or shot through with the bad—supply the ground of order or motion. Yet this is just the position that was staked out by the young Socrates and the other natural scientists before him. And it is perhaps in this light that we must understand the fact that, to Socrates' dismay, Anaxagoras, too, finally "fell back on the blind and aimless action of the elements."¹³ But this path is still, no less

than before, a dead end. For what is the cause of the natures of things? Science is no better equipped now than it was then to demonstrate by recourse to a combination of their material and efficient causes, rather than dogmatically assert, that the things truly do have natures. And so a coherent grasp of what is best for each of the beings merely leads back around, in the last analysis, to natural science, and to the difficulties intrinsic to it.¹⁴

It can be seen from the concessions he makes to it here that this train of thought, which leads back around to natural science, actually formed one element of Socrates' total view. For, in speaking of what is best for each thing, he has already conceded that teleology relies somehow on the natures of things. And this is to reduce "teleology," if only implicitly, to an accident of nature—to being nothing more, to repeat, than that order or position or motion of the things that most economically allows each one of them to obtain what it, by nature, needs. Besides this, Socrates goes on to concede here that "by necessity" (*anangkē*) anyone who knows the best (*to ariston kai to beltiston*) (for something) knows the worse (*cheiron*) (for it) as well, "since the science concerning them is the same" (97d4–5). And he seems to grant later on, too, that "the best" cannot stand alone, apart from "the worse" (98b5–6). But if the best (for something) is indeed inseparable from the worse (for it), this fact, which ensures that the good will always be less than complete or shot through with the bad,¹⁵ must, to repeat, be traced back to the nature of the being concerned, not to the causality of what is best (for it). Of course, had Socrates made these concessions in full awareness of what he was doing, he would have been led back around by them to the same low point in his lifelong scientific enterprise he occupied just prior to his encounter with Anaxagoras. That he did not do so, at least not yet, is made clear not only indirectly, by the fact that this was not the immediate result, but also more directly, by the fact that, notwithstanding these concessions of his to the contrary, Socrates still addressed what is best for each of the beings, falsely, as its cause and not as its orderer. Thus, while the concessions he makes to the train of thought that (by ascribing ordering to what is best

for each thing) leads back around to natural science indicate that it formed one element of his total view, the persistent entanglement of these concessions with an opposed claim (about the causality of the good) indicates in turn that it was offset by another element.

In retrospect, this is not altogether unexpected. It has turned out that ordering, not causality, has to be ascribed to what is best for each thing. So it would make sense, at least, if it were to turn out in much the same way that causality for its part has to be somehow ascribed to what is best for “all things.” We might suggest as much for now, at any rate. In that case, though, the very confusion or incoherence to which, we have seen, Socrates actually fell prey (in ascribing to what is best for each thing the causality that, we suggest, belongs in fact to what is best for “all things”) would have been inescapable for him from the very first. For he blurred “orderer” with “cause,” as well as what is best for “each thing” with what is best for “all things.” And, in light of our suggestion, this means that there were always two opposed elements to Socrates’ total view of the good. But because he failed to distinguish clearly between them—between “cause” or what is best for “all things,” on one hand, and “orderer” or what is best for “each thing,” on the other—he could hardly have avoided incoherently combining aspects of one of them, when he thought of it, with aspects of the other. Still, only one of these elements, what is best for “each thing” as the “orderer” of the beings, has been considered so far. It remains for us to consider, next, the manner in which what is best for “all things,” as the “cause” of the beings, might constitute a second element.

Perhaps what causes each of the beings, whose sum is the whole, is—if not what is best “for it,” which is not even coherent or intelligible—what is best for “all things.” At any rate, in thus shifting ultimate responsibility for each of the beings, for their natures and their needs, from a combination of material and efficient causes to an all-encompassing purpose, or final cause, teleology is not reduced to an obsolete natural science. And yet, with this shift, does teleology not merely jump out of the frying pan and into the fire? For just as “each thing” is essentially prior to what is

best “for it,” “all things,” that is, the whole, must be essentially prior to what is best “for it,” too. And it follows from this that what is best for all things cannot be addressed as the cause of “all things,” without obvious incoherence, any more than what is best for each thing can be coherently addressed as the cause of “each thing.” In the case of the latter, though, this incoherence was averted easily enough by understanding what is best for each thing as the orderer, not as the cause, of each thing. But a clear-cut distinction must be drawn, in this respect, between the good or purpose in question now—that is, what is best for all things—and what is best for each thing. What is best for each thing points back toward the nature, the needs, of each thing. And yet toward what nature, toward what needs, does the best for all things point back? Does “all things” have a nature? Does it, therewith, have needs?¹⁶ There is, by definition, nothing besides “all things.” In contrast to each of the beings, that is, the parts, the whole is complete, self-sufficient. For this reason, what is best for all things cannot possibly be understood on the model of what is best for each: as, that is, being best (good) *for* anything at all.¹⁷ To the contrary, what is best (for all things) can be understood, to use that term loosely, only as being somehow prior to all things. In this sense, which may be as much sense as we can give to the notion of a complete or transcendent good, what is best (for all things) may well be the first cause of the beings. And yet its very priority to all things or its transcendence means that it is, as it were, “beyond being”—or, more literally, that it is not.¹⁸ To speak of it as a cause, notwithstanding this, is therefore to speak of creation *ex nihilo*, or to speak theologically.¹⁹ This is the second element of Socrates’ view.

A consideration of the shifting range of meanings that Socrates assigns to the good in the first part of his account to Cebes serves to bear out our suspicion, whose target has now been brought out or honed, that his view of it did indeed consist in an incoherent combination of these two elements. For he speaks of the good, in one way or another, on four occasions here; and, despite or because of the lack of consistency with which he does so, a single thread runs through them all, which exhibits

his confusion in its regard. To begin with, that Socrates combined or blurred what is best for each thing with what is best (for all things) was shown by the ambiguity with which he first spoke of “the best,” as if it were in his view something simple or whole (97c5–6). Yet some awareness on his part of one of its elements, in its distinctness from the other, was indicated in the immediate sequel in which he went on to remove the ambiguity by speaking clearly of the best as what is best “for [each thing]” (97c6–d1). And, to press on now into uncharted territory, it was perhaps as a result of this awareness that he suddenly makes use, in the next place, of *two* terms (*to ariston kai to beltiston*) to convey, in one breath, his view of “the best” where previously he had made use of just one (*beltiston*) (97d1–4). Still, Socrates’ awareness that what is best for each thing (*to beltiston*) must be distinguished from what is best (for all things) (*to ariston*) remained, in the end, incomplete. For, even after introducing a second term for “the best” (*to ariston*), he speaks as though both terms for “the best” that he had just made use of (*to ariston* and *to beltiston*) had only one opposite, namely, “the worse” (*cheiron*); in other words, he speaks as though he still regarded the two terms (also) as conveying one and the same view of “the best” (97d4–5, compare 98b5–6). In this way, Socrates comes full circle: he has finally returned, via the view that “the best” is complex, to the view, with which he began, that it is simple or whole. And it is in keeping with this that when Socrates speaks of his hopefulness he does so ambiguously: by referring to it once in the plural, as his “hopes” (98b3), as well as once in the singular, as his “hope” (98b7). For he could neither reconcile the two opposed elements of his view of the good, nor could he, insofar as he blurred them, disentangle them from one another. He was confused.

It goes without saying that a rather far-reaching conclusion, touching on the soundness of teleology as such, as well as its rise and fall in Socrates’ eyes, has been drawn on the basis of an analysis that has perhaps been too narrowly confined to the first part of the account Socrates gives to Cebes (97b8–d5). And however true it may be that this part of his account is especially revealing so far as his confusion regarding the good is

concerned, if our analysis of it has not gone far astray, we must not only seek but also expect to find further support for our conclusion in its remaining two parts.

Further Evidence of Young Socrates' Confusion

Socrates begins (97b8–d5) and ends (98a7–b6) his account by stating in general terms, and with hardly any reference to particulars, his (confused) view of teleology or the good. In contrast to this, he devotes the central part of his account to recollecting his expectations concerning the application of that view, specifically, to heaven and earth (97d6–98a7). Now, whereas the incoherence or unintelligibility of his view of the good was disclosed by him only gradually or step-by-step in the first part of his account, it is disclosed more directly by him in its third and final part. For, to start at the end, immediately after speaking ambiguously of “the best” (*beltiston*), as if it were in his view something simple or whole (98a7–9), Socrates splits it up in his speech into its elements: “the best (*beltiston*) for each thing” and, alternatively, “the common good (*agathon*) for all things” (98a9–b3, compare 97d3–4). But it is in accord with the thread that ran through the shifting range of meanings that he assigned to “the best” in the first part of his account, too, when he speaks in the next place of “the best” (*to beltiston*) all of a sudden as if it were in his view something simple or whole (98b5). Again, Socrates has come full circle. And his wavering as to whether the good should be viewed as something simple or complex bears witness here, just as it did before, to the fact that its two opposed elements were not adequately distinguished by him.

As for the second part of his account (97d6–98a7), it alone focuses on the way Socrates expected that the causality of the good would be applied to particulars. And it is perhaps owing to this new focus that Socrates adheres exclusively to “the better” (*to ameinon*) when he speaks here of his view of the good.²⁰ Such adherence (to a single term for the good) is,

at all events, without precedent in the other two parts of his account. At the same time, it may well give the impression that the good was in his view something simple or whole, after all. And yet, in spite of this, Socrates will prove just as unable to avoid regarding the good (also) as complex here as he was elsewhere. He begins by recalling that after he formed his total view of teleology he expected that Anaxagoras would, in applying it to “the beings” (97d7), declare to him, in the first place, whether the earth is flat or round (97d8–e1). And not only did Socrates expect that Anaxagoras would go on to explain the necessary cause of this, he also expected that his explanation would take the form of an account of “the better and that it was better this way” (98e1–3). In the second place, Socrates expected that if Anaxagoras should assert that the earth is in the middle vis-à-vis everything else, he would then go on to explain the necessary cause of this situation, too, by giving an account of the fact “that it was better” this way (97e3–98a1). Looking back on it now, Socrates says that if Anaxagoras had in fact been able to “show by reasoning” or “demonstrate” these things to him, he would no longer have yearned for any other kind of cause—any other kind, that is, besides the final cause or the good (98a1–2). But the two questions whose solution would have put an end to Socrates’ yearning along these lines are distinct. For the one that concerns the nature of the earth, or its being the way it is, points toward the good as the cause of the forms as its answer whereas the other, concerned as it is with the earth’s position, points toward the good as the orderer or source of motion of what is already formed or generated. Each question, in other words, has to be answered by recourse to one or the other of the two opposed elements constituting Socrates’ view of teleology. Notwithstanding this, but not unexpectedly either, his view’s two elements were not distributed evenly or neatly between the two answers or explanations that he expected he would receive from Anaxagoras in response, respectively, to these two questions. For when it comes to his second question, Socrates looked for just one of the two explanations he had looked for in the case of his first. That is, while he expected that in order to explain the form of the earth, whether it is flat or round,

Anaxagoras would articulate *both* “the better” *and* “that it was better this way,” in order to explain its position he only looked to be shown “that it was better” this way. And if, as is likely, “the better” has to be identified with what is best (for all things) and “that it was better” with what is best (or better) “for it,” Socrates is still incoherently or unintelligibly ascribing causality for each thing (also) to what is best “for it.” And this confusion must cast its shadow over the answer or explanation he expected he would receive from Anaxagoras concerning his second question as well. In that case, he seemingly treats what is best for each thing—or what is best, more specifically, for the earth—as its orderer, which is of course not incoherent. And yet, it goes without saying, had he done this in fact, or in full awareness of what he was doing, he would have rejected teleology at once. More directly, though, it follows from the immediate prequel, in which he blurred what is best for each thing with what, as the best (for all things), causes it, that he must have blurred them here, too, if only in his thought. And this goes for the last question, or series of questions, Socrates poses here as well. Turning now from the earth, from its form and its motion, to heaven, he recalls that he was prepared to learn by inquiry from Anaxagoras about the sun, and the moon, and the other stars in just the same way as he had expected to learn about earth (98a2–3).²¹ But what he wants explained to him now is, more precisely, the motions of the heavenly bodies, “their speed relative to one another and their rotations (on their axes) and their other sufferings,” not their forms (98a3–5). And so it is in keeping with his second question rather than his first that Socrates now expects of Anaxagoras that he will explain to him the necessary cause of their “sufferings” by speaking, not of “the better” (*to am-einon*), but of “how each is better doing (what it does) and suffering what it suffers” (98a5–6).²²

Finally, as we observed in passing, Socrates has made use of an excess of terms to convey his view of the good in the course of his account. And is this excess, which lies in plain sight, really as unremarkable as the silence of scholars would lead us to believe? It should give us cause to pause, on the contrary, either because it is at odds with Socrates’ objective

here—to find in the good *the*, that is, the *one*, cause of the beings—or because it implies that he allowed himself to use four terms even though, in his own view, one alone would do. We for our part are now in a position to see that, in addition to being striking, this excess has to be traced to a combination of these reasons. It, too, is a consequence of Socrates' confusion about the good. For, inasmuch as he wavered as to whether the good is complex or simple, he would have been led to regard the many terms by which he conveyed his (confused) view of it as meaning different things (given its complexity) and, all at once or by turns, the same thing (given its simplicity).²³

Necessity or Purpose?

In articulating Socrates' view of teleology, this account (97b8–98b6) serves the deeper purpose of showing that he was, as we suspected almost from the outset, confused about teleology or the good. As a matter of fact, teleology itself, and not only Socrates' (confused) view of it, has broken apart into its elements in the process of its precise articulation.²⁴ It has proven to mean, on one hand, that the beings are ordered or moved for the sake of what is best for them; or, to put this in more technical terms, it involves a grouping of the final cause and the efficient cause. But it has also proven to mean, on the other hand, that the natures of things are themselves caused or created for the sake of what is best (for all things); or, to put this too in more technical terms, it involves a grouping of the final cause and the form.²⁵ And Socrates' initial hope or hopes for a *scientific* or *natural* teleology were made possible by the fact that he confused or blurred these two elements, or failed to distinguish them clearly from one another. That is to say, the synthesis of necessity and purpose that presented itself to him as a genuine whole, in light of this lack of clarity, seemed to him to lay claim to all of the benefits and none of the defects of its component parts or elements. His hope or hopes were short-lived, however, for the simple reason that they were as

unsustainable over the long run as they, or the total view that aroused them, was incoherent or unintelligible. For the two elements in question, out of which “the whole” of teleology is constituted, contradict one another. The one leads back around to necessity, the other leads up to freedom.²⁶ And when Socrates finally saw this, as indeed he did, he was forced to become consistent; he was forced to discard one element of his view and to retain the other.²⁷

A perhaps insurmountable obstacle stands in the way of doing so, however. For neither element taken by itself meets the minimum condition for Socrates’ acceptance. The grouping of the final cause and the efficient cause, if thought through, reduces to natural science. But natural science cannot get past reliance on mere belief, which is absurd. And the grouping of the final cause and the form, if thought through, culminates in theology, and theology cannot get past reliance on mere belief either—though perhaps it, for its part, need not try. An impasse is therefore reached whose gravity is conveyed by the fact that Socrates hoped to learn from Anaxagoras, above all, about the cause of heaven and earth. By taking up once again the subject of heaven and earth, or their cause, Socrates reveals that he was still preoccupied with what had been the favored object of his youthful examinations too: the whole or its roots. (Earlier, while giving a report of the sort of examinations entailed by natural science, he barely acknowledged that object. Reserve was called for in that context by the fact that, as a young natural scientist, he thought such things about the whole, or its cause or roots, as were at odds with piety. That he pays his objective more of the regard it deserves here, in the context of an account of teleology, is accordingly due to teleology’s proximity to—or, better, to its overlap with—theology.) Yet it is just this question, the question of “the [first] cause concerning the beings,” that is left open here. And it is not merely left open for the moment, as if it might be settled “at some time” in the future (99c4), but *for good*. Socrates’ last-ditch effort to learn from Anaxagoras the core, at least, of what he had desired to know from the outset—or what we may call, following Socrates’ lead, his first sailing in search of the cause of the whole

(99c8–d2)²⁸—has ended in failure. And the assumption (or belief) underlying natural science, and perhaps even science more generally, that there is nature, has turned out in the end to be no more than that. Hesiod, or the alternative he represents, therefore remains not only a permanent possibility, but also perhaps a more internally consistent one than that “science,” which boasts, but merely boasts, of being reasonable.²⁹ Where, then, does that leave science or the life dedicated to it?

PART III



Chapter 6



Science and Society

The Goodness of Science

Socrates now gives what might appear at first glance at least to be an account of his rejection of (Anaxagorean) teleology (98b7–99d2). And yet that account is completely beside the point, not to say frivolous. For all that, Socrates' rejection of teleology is not left unaccounted for. What it was that *really* persuaded him to reject teleology (to the extent that he did) was already unobtrusively disclosed: teleology was unable to survive the precise articulation it was just subjected to (97b8–98b6). But that means the “account” of Socrates' rejection of teleology given here is not only frivolous but superfluous as well. And if it does not, and need not, accomplish its ostensible purpose, what then is its true purpose? In connection with this, when Socrates found that he was unable to obtain knowledge of the causality of the good, either by discovering it for himself or by learning about it from another, he made a “second sailing in search of the cause” of the whole (99c8–d2). However, in presenting his development from his first sailing to his second, Socrates does not obviously reveal the reflections that led him from the one method, after it failed, to the other. And this is peculiar. After all, even if there is a path that somehow links the unavailability of universal teleology to the new method that Socrates “pieced together at random” (97b6–7), it is by no

means self-evident. And so we are confronted, on one hand, with a crucial development in Socrates' thought that stands in need of some account and, on the other hand, with an account whose true purpose remains in question and which appears, to that extent, superfluous. Inevitably, one wonders whether the latter account is not meant to meet the former need. And on the face of it at least there is some indication that it is, for that account occupies the space in between, and thus serves to link, Socrates' precise articulation (and rejection) of teleology (97b8–98b6) and his statement of his "second sailing in search of the cause" (99d4ff.). Perhaps, then, the account Socrates gives here (98b7–99d2) is a sort of prelude, meant to reveal—albeit not obviously, for some reason—the reflections that prepared the ground for his second sailing.

Science or philosophy has just been left teetering on the brink of collapse in the face of the impasse that was reached through Socrates' uncompromising efforts on its behalf. Aware of not knowing "the things aloft and under the earth," he could no longer take the goodness of science for granted. And to press on with the search—heedless of those who say or believe that there are, among those "things," gods who render its objective and condition (nature) nonexistent—would not be reasonable. Accordingly, whatever further developments Socrates' thought may undergo, it would not be unexpected if they should turn out to be affected by, or even to be effects of, his reflections on philosophy's precarious situation vis-à-vis theology.¹ At the same time, assuming that Socrates' reflections on this sensitive issue did indeed prepare the ground for his second sailing, he would have to refrain from obviously revealing them as such here. He need not, however, and does not, refrain from giving clear, if not perfectly obvious, signs that subsequent, positive theoretical developments in his thought were indeed prepared by such reflections.

A "second sailing" means to have recourse to the oars when the wind will no longer carry the ship; it is a second best, but best available, course.² During his first sailing, then, Socrates hoped that favorable winds would carry him along safely toward knowledge of the cause. He was eventually disabused of his hope or hopes, however, and so in making his second

sailing he found himself all but compelled to depend on his own, merely human efforts. Now, in referring to his new method, and, by implication, to his previous one, as his second and his first sailings respectively, Socrates is in fact merely following Simmias' lead.³ Simmias had prefaced his objection to Socrates' arguments (or myths) on behalf of the immortality of the soul with a statement of man's situation with regard to the acquisition of knowledge of such matters (85b10–d10). As it seems to Simmias, and apparently to Socrates as well (compare 85c1–3 with 85e1–2 and 107b4–6, as well as 108d1–9 and 114d1–2), clear knowledge of such matters is something either impossible or extremely difficult for anyone to obtain in this life (85c1–4). At the same time, according to Simmias' statement, it belongs to all men who are not very soft to achieve one of three things: either to learn from another or to discover for oneself what is the case (85c7–8, 99c8–9); or, if that is impossible, by taking hold of the best at any rate and least refutable of "human accounts," to sail through life in the midst of danger carried upon that (human account) as upon a raft (85c8–d2); or, if it is not possible for anyone to pass across more safely and less dangerously upon a sturdier carrier, to be carried upon "some divine account" (85d2–4), that is, "an argument revealed to man by divine grace."⁴ As can be seen from his immediate reaction to Simmias' statement (85e1–2), to say nothing of the fact that he later adopts the sailing metaphor himself (99c8–d2), it is unlikely that Socrates significantly disagrees with Simmias' assessment of the situation. As for Socrates' first and second sailings, moreover, do they not plainly correspond to the first (compare 85c7–8 with 99c8–9) and second carriers that Simmias has just outlined here? Insofar as they do, the question that Socrates must have faced at this moment, in the wake of the failure of his first sailing, is this: which carrier, the second or the third, is safer and less dangerous for a human being to rely on? That is, so long as science in the fullest sense is impossible or dogmatic, as indeed it is,⁵ is it more reasonable to take one's bearings in life by human reason or by divine guidance? As a matter of fact, the meaning of the correspondence is even more precise than this. For it implies that the world (the wind and the sea) and human reason

(the sail-driven raft) do not simply unite in mutual support of man's hope for security or the good, on one hand, and his desire for knowledge (of the cause), on the other (as Socrates had hoped: 97d1–3). And, as soon as Socrates was swept away from the hope or hopes that initially concealed this grim state of affairs from him,⁶ he was led to wonder whether, given its limits, human reason (the oar-driven raft) is sturdy enough to carry a man securely through a world (the wind and the sea) that is not altogether hospitable to it, or whether “some divine account” is not the relatively safer bet.⁷

If we have not been led astray by these signs and by our own expectations, Socrates' rejection of teleology would appear to be linked by an almost continuous path, via his reflections on the question of reason and divine guidance, to his second sailing. And we should bear this in mind as we examine, in the first place, the prelude to Socrates' second sailing and, in the next, the second sailing itself.

Prelude to Socrates' Second Sailing: The Theologico-Political Problem

Through reading his books, Socrates saw that Anaxagoras neither made use of mind (compare 97c2) nor held any (true) causes responsible for ordering “the things” (*ta pragmata*) (compare 97c3–4) but appealed instead to various material causes (98b8–c2). And he now recalls what, as a result of this, Anaxagoras' position “seemed [to him]” to be like. As it seemed to him, Anaxagoras was in a position just like that of “someone” who, while unavoidably saying that Socrates does all that he does “by mind,” should thereupon appeal, in attempting to state the cause of each thing that Socrates does, to a combination of material and efficient causes (98c2ff.). And with that, man, whose representative here is “Socrates,” for the first time moves to the center of Socrates' attention. The question raised in man's regard is this: how is his *motion* or what he does—specifically, how is the “sitting” and the “conversing” of Socrates here and

now (98c5–6 and 98d6 as well as 61c10–d2)—to be understood? In what follows, the natural scientist's approach to man (98c2–d6, 98d6–e1) is contrasted by Socrates with what "everyone" (who relies on the prescientific awareness of things) somehow knows about human beings already (98e1–99a4, cf. 99b1). Throughout, Socrates himself sides with the latter against the former. And, by distancing himself in this way from the natural science he once engaged in, Socrates at last acquires the freedom to reproduce, apparently without accusing himself, a more or less complete scientific account. According to that reproduction,⁸ the natural scientist would understand the fact, of which "everyone" is prescientifically aware, that Socrates is sitting and conversing here and now by appealing to a combination of material and efficient causes (98c2ff.). To this Socrates presently responds that the beings generally, and therefore human beings, too, cannot be adequately understood by recourse to such causes (98b9–c2, 98d6–e1, 99a4–7, 99b2–4). This response, which is a product of the dialectical analysis of causality that earlier left science or philosophy reeling, removes the theoretical obstacle that stood in the way of a "humane," "common sense," or nonreductive approach to man. Still, it does not suffice to make clear why it was at this moment in particular that Socrates felt compelled to turn to the study of man of all things. (Nor, for that matter, does it suffice to make clear how exactly, by relying on what sort of evidence, and on what manner of handling it, a genuinely scientific or philosophic understanding of man would be achieved.) To this end, it is necessary to consider the way in which man comes to sight in the perspective of natural science, on one hand, and in the perspective of the prescientific awareness of things, on the other. And this, as it happens, is just what Socrates invites us to do here by contrasting the alternative interpretations of his own case embodied in each approach.

After reproducing a scientific account of his deed (98c2–d6) that would, absurdly he says (99a4–5, 98c1–2), attribute his sitting here and now to such things as his sinews and his bones, Socrates undertakes to replace it with an account that, by not trying (in vain) to descend beneath the prescientific awareness of things, captures what he considers to be

“the true causes” of it (98e1, compare 99b3 as well as 98b9–c2).⁹ Socrates’ own account of his sitting or of his acceptance of death (98e1–99a4) relies on the fact, if it is one, or the evidence for the fact, of which “everyone” is prescientifically aware, that a human being can sometimes choose (99b1) to do the just or noble (beautiful)—or, as we would say, “the moral”—thing. As for the just thing itself, or its makeup, Socrates implies—by speaking of his own choosing of it as a response to the opinion (98e2) or command (98e5) or order (99a4) or the law of “the Athenians” (98e2) and of “the city” (*polis*) (99a4)—that it consists in deferring to the political community to which one belongs. And it would seem at any rate that a man can choose the just thing despite knowing, as Socrates at least surely did (cf. 68c5–69d7), that he will have to pay a penalty, indeed, even the penalty of death, as a result (98e4, 99a4; *Republic* 361e3–362a2). For, as Rowe observes, Socrates acknowledges (98e5–99a4) that “his muscles and bones, were it up to them, would naturally opt to save their own skin.”¹⁰ Yet it is not “up to them,” according to Socrates’ indications here, to the extent that the just or noble thing is what is chosen for its own sake.¹¹ The just thing consists not only in deferring to the city and its laws but also, beyond that, in devoting oneself to them altogether, life and limb. The city is therefore the whole to which the individual, as a part, looks up.¹² And, by looking up to the intrinsically attractive order of that whole, the individual may act on behalf of an end, namely, the idea or form of justice, that altogether transcends himself.¹³ On the other hand, it is true, Socrates identifies the just thing with what is “better” (98e2–5) in contrast to what is “nobler” (99a2–4, compare 114d6). And, altogether strictly maintained, this identification is not incoherent—even if its presupposition or implication, namely, divine justice, is rather incredible (63b9–c4 as well as 108d1–9, 114d1–2, and 107c5–8). But, however that may be, by being identified, on one hand, with what is “nobler” (99a2–4) and, on the other, with what is “better” (98e2–5), justice appears here as a whole in which the noble and the good are combined with one another.¹⁴ As such, it is of concern for its own sake (“deontological,” in our jargon) as well as for one’s own sake (“teleological”) (*Republic*

357b4–358a3). And it is the understanding of man that goes together with *this* account of justice, the transcendence of which can still be maintained, if not altogether strictly, that stands in especially stark contrast to the natural scientist's approach.

The consequences of that approach for the understanding of man were alluded to already by Socrates' acknowledgement (98e5–99a4) that "his muscles and bones, were it up to them, would naturally opt to save their own skin." For Socrates suggests by this that, if he really were what he appears to be in the perspective of natural science, his good or end would not necessarily require of him that, in deference to the city and its laws, he do the just thing. And the reasoning at the basis of this suggestion is not hard to uncover. After all, man comes to sight in the perspective of natural science as a complex body whose makeup depends on simple or simpler bodies moving aimlessly. As this complex body, the nature of man, along with its material and efficient causes, is essentially prior to the good. What is good is determined or posited by human nature, by the human body's desires or natural impulses, which set and keep man in motion toward it. By thus preempting the possibility that man can freely "choose" (99b1) a good or end that somehow transcends man, or one's own desires or natural impulses (*Republic* 464d7–9), the natural scientist's approach to all things preempts the possibility of just or noble deeds as such. For justice is, as it seems, altogether transcendent or noble.¹⁵ On the other hand, that approach preempts the possibility that justice is by nature good for man, too, insofar as doing the just thing may have bodily harm or outright destruction as its natural consequence (*Republic* 496c8–d5; 359b6–360d7, 361e3–362a2, 364a1–b2). As for consequences of another kind, consequences such as may be brought about by gods concerned with justice, they were dogmatically ruled out in advance by natural science (*Laws* 891b8–c9). Owing to both of these reasons, then, had Socrates still accepted the natural scientist's approach, he would "naturally" have chosen to do the unjust or ignoble thing: to (mercenarily) "escape" and (basely) "desert" the city in order to save himself (cf. 71a6–7).¹⁶ To put the matter somewhat differently, the just or noble things

appear in the perspective of natural science to be by convention rather than by nature, that is, to be in speech but not also in deed or in fact (*Laws* 889d6–890a9; compare *Theaetetus* 172b2–8 and *Protagoras* 320c6ff. with 361c2–d5).¹⁷ Aristotle, too, in keeping with the Athenian stranger's account of the natural scientists' perspective on justice in book 10 of the *Laws*, says that to all of "the ancients," that is, to all Socrates' predecessors (*Metaphysics* 1069a25, *On Generation and Corruption* 314a6), justice seemed to be noble by convention and in the opinion of the many; not, however, by nature or in truth (*Sophistical Refutations* 173a7–16.).¹⁸ And it is in this respect in particular, or with respect to the moral-theological dimension of things, that the contrast between the understanding of man associated with the prescientific awareness of things and, alternately, with the natural scientist's approach shows itself in all its starkness.¹⁹

Socrates has raised the question of man, or of man's motion (98c3–99b2), in the context of the larger question about the cause of "all things" or the whole (99b2–c8, 98b8–c2). He has done so, as can now be seen, because the two questions are linked. As a part of the whole, man must be understood in light of the whole. The approach of natural science to the whole obstructs a turn on the part of those engaged in it to man, for one, as he appears in the perspective of the prescientific awareness of things.²⁰ But Socrates has by now come to view natural science as impossible or dogmatic. And that means the theoretical obstacle that stood in the way of such a turn, or the foundation on which the young Socrates had based his opposition to the city and its laws, has been removed. Man, the motion of man, may have to be understood along the lines of what "everyone" already knows, or in light of law and justice, after all. It is true that doing so would require of the whole that it be teleological-theological in its makeup. For, as we have seen, justice appears as an idea or form whose transcendence or nobility presupposes or implies that it is essentially prior to man's nature (along with its ultimate material and efficient causes) and whose goodness presupposes or implies, at the same time, that it is of concern to gods.²¹ Still, no matter how incredible that vision of the whole may seem, it remains in Socrates' mature view, according to

which the whole or its cause is mysterious, a permanent possibility. And this concession of his to the possibility of the gods of the city, as he reminds us here, is one his predecessors were unable or unwilling to make with truly open minds (compare 99c6–9 with 99c1–c6). Now that *both* the (moral) understanding of man associated with the prescientific awareness of things *and* the (teleological-theological) vision of the whole presupposed or implied by that understanding have been rehabilitated, would a turn to the study of man not seem compulsory?

Although philosophers abroad, too, deserved death in the eyes of the many (64a4–b8, *Republic* 517a4–6; *Protagoras* 316d3–317c2), the extent to which Athens, even tolerant Athens, was opposed to philosophy is demonstrated here before our eyes. The penalty that Socrates awaits with such unforgettable patience, the penalty of death, was imposed on him by the city. And Socrates brings this to the center of our attention now (98e1–99a4). By doing so, he broaches the question of the philosopher's—not just his own—place in the city.²² This is not entirely unexpected: at this moment, in the wake of the failure of his first sailing, this is the very question that Socrates must have faced. Philosophy is opposed to the (moral) understanding of man associated with the prescientific awareness of things and the (teleological-theological) vision of the whole presupposed or implied by that understanding. But if the foundation on which the philosopher bases his opposition to the former is a dogmatic opposition to the latter, and nothing more, then what becomes of the goodness of the philosophic life? It would then depend on mere belief, which is absurd.²³

For the first time, led on by the worry that this was the case, Socrates felt compelled to raise the question “why philosophy?” or “why science?” To raise this question means above all to raise the question of the goodness of philosophy from the point of view of the city and its laws. Or rather, since devotion to the city and its laws is just, it means to assess science or philosophy from the point of view of justice. Such a course is compulsory now in part because a more direct, critical examination of the (teleological-theological) vision of the whole that is presupposed or

implied by the opinions of the city concerning things lawful and just is indeed neither possible nor pious (*Apology* 18b4–c4, 23d2–7, 26d1–9; cf. Xenophon *Memorabilia* IV.7.6 as well as IV.3.14 and I.1.12–13). Yet regardless of the cognitive status of the specific vision of the whole that they presuppose or imply, it is the lawful and just things themselves that call into question the nobility and goodness of philosophy as a way of life. And a critical examination of these things would seem for its part to be possible as well as pious. The philosopher cannot, without absurdity, take it for granted that man's good or end requires of him that he live a philosophic way of life as opposed to a political one. Only a truly open-minded reckoning with the opposing point of view will do.

Now, Socrates had initially aroused the expectation that he would replace the natural scientist's accounts (98c5–d6 and 98d6–d8) of what he is doing here and now, sitting and conversing, with explanations of his own (98d6ff.). As it happens, he fails to offer his own explanation of the second deed. And this apparent oversight is all the more surprising for the fact that the deed in question, "conversing" (*dialegesthai*), is nothing other than Socrates' peculiar manner of philosophizing. Yet the omission may perhaps have to be traced back to the fact that while Socrates' sitting could be and was presented by him in terms of his concern for justice or law-abidingness (98e1–99a4), the same cannot be said for his conversing. For, to say nothing now of other considerations, Socrates had declared at his trial that he would never, even if it meant defying the city and its laws, leave off conversing or philosophizing (*Apology* 29c6–30a3, 37e3–38a7). It seems Socrates' critical examination of things lawful and just eventually enabled him to side with philosophy against the city and its laws.²⁴ But on what basis? We can now understand why it was at this moment in particular that Socrates felt *compelled* to turn to the study of man of all things, or to man as he appears in the context of the city and its laws. For it is hard even to imagine how anything, much less a conclusion as significant as this, could ever come of such a turn. After all, the goodness of the philosophic life depends on the character of the whole, on whether it is natural or divine, and this cannot be found out directly. And what

bearing can an examination of law and justice have, indirectly, on the question of the whole or its cause?²⁵

None whatsoever, unless the unexamined opinions characteristic of the city and the citizen concerning things just or noble somehow imply and inspire, more than they presuppose, a specific, rather incredible vision of the whole. In that case, at any rate, the whole may have to be understood indirectly, in light of man or, more precisely, man's moral perfection.²⁶ And perhaps this provides a hint as to what Socrates means when he suggests that the search for the cause of generation and corruption continues with his second sailing (cf. 99c8–d2 in light of 97b3–7).²⁷ Socrates' view that an ordering mind is what, given the right conditions, accounts for the forms or beings of our experience would have survived his denial that a superhuman mind is what does this more or less unconditionally. Yet, so far as the source of the order of the whole is concerned, does that not leave the human mind, the human soul as the only remaining option (79b8–10, contrast *Laws* 716c4–6)?²⁸ If it does, to take this one step further, might the soul that has become perfect (69a6–d7) reflect the order of the whole more perfectly, less incredibly than the imperfect one? For perhaps the soul of every human being is unconsciously (82c2–3) compelled to regard the intense pleasure or pain it especially experiences as most real and most true, in which case only the soul whose experiences of pleasure and pain are themselves in order would let the order of the whole be as it is (82c5–8, 82c8–e7)?²⁹

Chapter 7



Dialectic

The Objects of Socrates' Second Sailing

Socrates' account of his deed relied on the apparent fact, of which "everyone" is prescientifically aware, that a human being can sometimes choose to do the moral thing. But, in our haste to clarify what it was that compelled or pressured Socrates to turn to the study of man of all things at this moment, we proceeded straightaway from the removal of the theoretical obstacle that stood in the way of Socrates' initial acceptance of the prescientific awareness of things to all but conceding the fact itself. In doing so, we passed over the evidence for it without remark. Exactly what, then, is the evidence that first discloses this feature or "fact" of man's nature, if it is a fact? Or, since it is necessary to go beyond that, to what sort of evidence does Socrates look, in his capacity as a scientist or philosopher, for its suitability for disclosing the natures of the beings more generally? Apart from this, we await also an elucidation of the way in which Socrates proposed to examine that evidence, whatever it may turn out to be, and to examine, therewith, the beings whose natures first disclose themselves through it. And so, with an eye to these two questions, we come at last to Socrates' statement of his second sailing (99d4–100a8ff.). That statement focuses, first, on the makeup of the evidence through which the natures of the beings primarily disclose themselves

according to Socrates' new method (99d4–100a3) and, second, on describing that method's peculiar manner of handling, examining or treating that evidence (100a3–7ff.). Thus, after having clarified the practical pressure that led him, in the wake of the failure of his first sailing, to turn to an examination of man, Socrates goes on to address thematically the evidence that forms the starting-point of that examination as well as, in a few words, the critical treatment of the starting-point—the method, in sum, or the positive theoretical development—that gave that turn its essential character.

According to what he says here, after the failure of his first sailing, Socrates was forced to abandon his examination of “the beings” (*ta onta*) (99d4–5). And it seemed necessary to him in this situation to take care lest he suffer the very thing that those who behold and examine the sun during an eclipse suffer (99d5–6). For, he supposed, some destroy their eyes if they do not examine an image of it in water or in something else of that sort (99d7–e1). Thinking over this kind of thing, he feared that his soul would be wholly blinded by looking at “the things” (*ta pragmata*) directly with his eyes and by endeavoring to apprehend them with each of the senses (99e1–4). And so, as it seemed to him, he was obliged to take refuge (from the beings or things) in “the speeches” (*oi logoi*), and to examine the truth about the beings or things in them (99e4–6).

On a first impression it could seem to us that Socrates' statement is meant to suggest that his second sailing involved a turn from a direct examination of the things or beings themselves, as they are revealed to the senses, to an indirect examination of the speeches about the things or beings carried out by the soul. And that turn could seem to us to be motivated by the realization, which is apparently supported by earlier remarks of Socrates, that being is imperceptible to and even destructive of the senses (for example, 65a9–66a8, 67a2–b5, 78c10–79a10, 79c2–d7). In any case, this is a popular reading of the passage.¹ Socrates goes on to concede, however, that the metaphor is “in some way” flawed (99e6–100a1). For he refuses to accept in any way that examining the beings by means of the soul, “in speeches,” is to examine them any more in images

and any less directly than examining them through the senses, “in deeds” or “in works” (*ta erga*) (100a1–3).² Now this qualification surely does not mean, to forestall another popular misreading, that speeches are somehow more, or more directly, reflective of the nature of each of the beings than deeds (works). It means, rather, that speeches reflect what each of the beings is neither more nor less directly than deeds.³ There are then two aspects of the beings: the speeches revealed to the soul, on one hand, and the deeds revealed to the senses, on the other.

Moreover, Socrates’ concession does not yet amount to a withdrawal of the metaphor. He has conceded only that it is “in some way,” not completely, flawed. And if, minus the specified flaw, it is consistent with his method, as he indicates it is, the metaphor or what remains of it has to be reconsidered in light of Socrates’ qualification. In the event, the blindness to which it referred acquires new meaning. It was suggested by the metaphor itself that those who behold the eclipsed sun directly risk destroying their eyes (99d7–e1). But, in his explanation of the metaphor (99e1–4), as distinguished from the metaphor itself (99d7–e1), Socrates does not say that blindness (destruction) of the senses (eyes) would occur as a result of their direct apprehension of the things (eclipsed sun). Instead, he speaks of a blindness that affects, not the senses, but “the soul.” The eyes or senses would, apparently, be left unscathed. And this is intelligible only in light of Socrates’ qualification. For, insofar as one aspect of the beings is revealed to sense-perception, another to soul, to behold the beings with the senses is to apprehend that aspect of them that is revealed to them, or the deeds, whereas to (attempt to) behold the beings *exclusively* in this way would blind the soul or make it oblivious to their remaining aspect, the speeches. This is the blindness to which Socrates refers here—to be exact, it is a kind of narrowness or incompleteness of perspective. And the possibility that those who examine and behold the beings through both sense-perception and the soul are not in fact blind (to the beings in their fullness) is, accordingly, left open here. Indeed, it was probably with just this possibility in mind, or to keep it in play, that Socrates had suggested to begin with that only “some,” not all, who

behold the eclipsed sun directly destroy their eyes (99d7–e1). As for Socrates himself, then, he did not intend to cease beholding the beings with his eyes or senses, a reaction that would only leave him blind in a different way, but to combine this sort of perception with another sort of perception.⁴

Thus, notwithstanding our first impression, it was not owing to the fact that the beings are somehow imperceptible to, and even destructive of, the senses that Socrates was afraid of being blinded. The blindness he feared was connected with his discovery that, while a being's nature is revealed to sense-perception or the senses truly, to the extent that it is revealed to them, it is not revealed to them completely or fully. And an (attempted) exclusive reliance on the senses, when it comes to examining the natures of the beings, would therefore make one oblivious to what they are in their fullness. And it was, to repeat, such obliviousness or blindness as this that Socrates was afraid of suffering.⁵ We are not surprised to find this out here. At this moment in his intellectual development, Socrates could hardly have avoided this fear. For he had come to see that the forms or beings that "everyone" is already, prescientifically aware of are impervious to explanations "from below," or that natural science is essentially derivative, incoherent, and incomplete. And it followed from this that the forms or beings, as we already know them, are perhaps so perishable or fragile that science itself (which is of them) risks being wrecked. Socrates' last-ditch effort to fortify the beings, or to know them fully, assumed the form of a short-lived search for a scientific (or natural) teleology, for a superhuman mind that might be both their orderer and cause. It did so in response to Socrates' discovery that what accounts for the forms or beings is some mind, which orders or sorts what is given. This effort of his was unsuccessful, however. And confronted with the imperviousness of the things to explanations "from above," too, Socrates was left in the awkward position we find him in now. For while he is still cognizant of the dependence of the beings of our experience on a surveying mind, he has added to this discovery the further insight that it is not a superhuman but, as far as he knows, at least, a

merely human mind that plays this role. Natural science, to the contrary, is essentially oblivious to what a being fully is, or to the noetic character or aspect of being. And so Socrates had to have been keenly aware at this moment of the necessity of replacing natural science with a new method that is not affected by such obliviousness.

Socrates feared, then, that if he did not develop and move his thought beyond the perspective of natural science in such a way as to encompass the noetic character of being, his “soul” would remain wholly blind. And, upon deliberation (99e1–2), to remove this fear, he turned to “the speeches.” He did so evidently because he thought that the aspect of the beings that is perceptible to the mind or the soul is reflected especially in them (99e1–100a3). And this adds up. As we saw, the form or character that qualifies a given perceptible being for inclusion within a distinct class, its class-character, what the thing is, is not perceived as such with the senses but rather with the mind. And those prescientific notions or opinions, concerning which beings are which (sort), or what each of the beings is, present themselves in ordinary language or speech. Now, in turning to the speeches, to say it again, Socrates does not disregard the evidence for the natures of each of the beings supplied by the senses. And the reason for this can now be made clearer. What is perceived with the senses remains as reflective of a particular being’s nature as its class-character, which is itself conveyed in speech (or definition), because however much the latter may be an image of the former and derived from it, the former in turn, so long as it is named, is necessarily an image of the latter, too.⁶ Each aspect of being has to be grasped, in other words, in light of the other. The classes, the universals or the forms present in speech, cannot be conceived of without reference to the particular perceptible things, the deeds. And those perceptible things cannot for their part be conceived of without reference to the classes. They are inseparable. It follows from this that the natural scientists’ obliviousness to the noetic character of being, the narrowness or incompleteness of their perspective, ensured that they were not in fact working from an adequate grasp of the deeds either. Unconsciously, irresistibly they were led to make use

of the prescientific awareness of things, the classes.⁷ Socrates' mature inquiry into the natures of the perceptible things, in contrast, necessarily takes its bearings from what is said about each of them.

The speeches reveal that the world is articulated and ordered into distinct, irreducible classes or kinds or forms of beings (*Parmenides* 127e9–10)—for instance, human beings, horses, dogs, and cloaks. Parting ways with the natural science of his youth, the mature Socrates' more complete view of being implies that the speeches about the distinct beings or classes are, as one commentator put it, “based on some awareness, on some perception with the mind's eye, of something.”⁸ This could seem trivial, perhaps, were it not for this: by taking the speeches as his starting-point, and by turning in the process to the prescientific awareness of things, Socrates brings together or fuses, at least initially, nature and convention (law), two spheres whose absolute distinctness he had insisted on as a young natural scientist. For those beings or classes not unambiguously evinced or supported by the deeds visible to all had been identified by the natural scientists with convention pure and simple (*Laws* 889d6–890a9; *Theaetetus* 172b2–8; Aristotle *Sophistical Refutations* 173a7–16), regardless of their high universality in speech.⁹ Yet, according to Socrates' mature view, the nature, form, or class-character of each of the perceptible beings is not revealed as such to the senses; it is recognizable primarily through what is said of it. And it is only now, as a result of this revolutionary and at the same time mundane view, that the scientific or philosophic treatment of moral-political things is made possible. For one is enabled by it initially to accept as having distinct, irreducible natures, forms, or class-characters of their own not only such things as horses and dogs, for instance, but also or especially those things universally said (above all, by the members of the political community to which one belongs) to be divine or just.¹⁰ And so it is accordingly in this context that Socrates points to the close connection between his new view and the examination of (what is said of) the divine things, on one hand, and the human things, on the other.

To begin with the former: a great deal of scholarly dispute centers on

the meaning of Socrates' choice to liken the beings or things to the eclipsed sun.¹¹ And yet it is obvious, in the first place, that by singling out in this context a heavenly motion or event as the thing to be examined, Socrates implies, in keeping with what we suggested earlier, that the search for the cause of the whole continues with his second sailing. Besides implying the continuation of his preoccupation with "the things aloft," a preoccupation he has maintained through each of the three main stages of his intellectual development, there is a second, and more important, but no less obvious reason, for Socrates' choice of imagery here. For the specific heavenly event he mentions, a solar eclipse, happens to be one whose occurrence was almost universally said in Socrates' day and age, not least of all by the city and its laws, to be a god-sent or divine sign.¹² Of course, this was implicitly disputed by the natural scientists (the only group Socrates could have in mind when speaking here of those who not only "behold" but also "examine" solar eclipses: 99d6), all of whom believed that such events could be explained in terms of natural causes alone.¹³ But, by mentioning a solar eclipse at the same time as he assumes the burden of yielding somewhat to what is said about (such) things, Socrates is surely posing *the question* of the event's divine origin, a question the natural scientists were unwilling or unable to consider with truly open minds.¹⁴ It goes without saying by now that Socrates was aware of being ignorant of the divine or the gods and their doings. Yet he was enabled by his new method to formulate, and he felt compelled to face, the question of whether those who say that some things are or are done by gods are in possession of a knowledge superior to his own, merely human knowledge. Perhaps certain things are or are done in fact or in deed just as they say they are? Whatever else a god or the divine may (be said to) be, however, it would also seem to be (said to be) so perfect and incomparable as to be beyond the reach of human speech.¹⁵ It is clear, in all such cases, that the question "what is a god?" cannot be settled in this way. Socrates remains preoccupied with the examination of the divine (*Euthyphro* 5a5–7; contrast *Laches* 186b8–c2), then, but that examination of his is not competent to address its own ultimate subject matter

directly. It must proceed indirectly, if at all. And this brings us, and Socrates, to the human things.

In an alleged attempt to make more clear or transparent to Cebes the statement of his second sailing, a statement he evidently gave despite knowing his poor interlocutor would not understand it entirely (100a7–9),¹⁶ Socrates will go on to explain it at some length.¹⁷ Unlike the statement itself, this alleged explanation (100b1ff.)—or, as one may suspect it of truly being, this new and distinct account—is easily “understood” by men of limited mental capacities (102a4–10). Nonetheless, whatever its ultimate status, in the course of the account Socrates surely connects his new method closely with the study of the human things, that is, with such things as the noble (beautiful), the good, the just, and the pious (compare 100b4–7 [c4–7, c10–e3] with 65d4–8, 75c10–d4, 76d7–77a5, 78d1–4, as well as *Parmenides* 135c8–d2 and 130a8–d9). It follows from what the second sailing has so far proved to entail that an examination of these things would take as its starting-point the accepted opinions or speeches about them and then ascend somehow away from there. The onset of the practical pressure that led Socrates to wonder at this moment whether what is universally said of the divine and just (noble) things in particular is in fact said of them knowingly or truly was, therefore, itself accompanied by a revolutionary development in his thought. And this development enabled him, for the first time, to take what is said of such things at face value in his capacity as a scientist or philosopher, as conveying at least some truth, perhaps only the partial truth, about them.¹⁸

With this, we find ourselves back where we began: at man, at Socrates as the representative of man, sitting in prison patiently awaiting his death. For Socrates’ own explanation of his sitting or of his acceptance of death did not, like the natural scientist’s account, try (in vain) to descend beneath the prescientific awareness of things. His account referred the deed to his “choice.” He could choose from one or another “opinion” he held about what he should aspire to do, or about the best course of action or end (compare 99b1 with 98e3 and 99a2). But these opinions of his were revealed in his “conversing” or speech. Socrates’ account of “the true

causes” of a human being’s deeds was, then, based primarily on the evidence contained in opinions as revealed in speech. And, since those opinions or speeches may well be, as indeed they were (98e4, 99a2–3; cf. *Crito* 53b3–54a2), about which deeds are and are not just, or which deeds do and do not merit inclusion in the class of just things, Socrates focused also or especially on opinions about justice as they come to light in speech. And so the account Socrates gave of his own deed evidently reflected his new approach, the approach of his second sailing (Xenophon *Oeconomicus* 6.13–17, 10.1, *Memorabilia* III.11.1). Now, that human beings can choose to act justly and nobly—this was the apparently incontrovertible fact on which that account of human motion relied. Yet this “fact” was initially accepted by Socrates, not only because he experienced it himself, for one, in coming to worry whether he was living in the right way, but also or especially on the basis of the evidence furnished by the truly incontrovertible fact that individuals and political communities in all times and at all places have *said*, at any rate, that individuals and political communities can act justly (or unjustly). And this evidence, the high universality of opinion or speech indicating moral aspirations or ends of one kind or another, formed the starting-point of Socrates’ approach to man.

Mundane as it may seem to begin with, Socrates’ starting-point has far-reaching consequences. And it could well be objected that those consequences reach out so far beyond their mundane starting-point that, before long, they become altogether incredible. For there is surely a difference, and more often than not a tragic disproportion, between what is said (about what ought to be done) and what is done. All too often, for instance, we watch with indignation as the righteous come to ruin, while the mercenary and the base prosper (cf. *Gorgias* 511b6). And what is the use of reflecting on such speeches, on lofty aspirations or ends, that are not liable, as these and other harsh experiences go to show, ever to be fully realized in or by the deeds of men? Since, for the most part, if not always, the reach of the speeches exceeds the grasp of the deeds, it could seem that an approach to man that starts from the former can shed little

or no light on “the true causes” of—nor can it (assuming it ought to) do much or anything to improve—the latter. This objection is neither lacking in force nor novel. Modern political philosophy all but begins by leveling it, to great effect, against the whole “utopian” tradition of political science whose philosophic basis was first laid by Socrates (Machiavelli *Prince* XV, *Florentine Histories* VIII.29; Bacon *The Advancement of Learning* II.xxiii.49, II.xxi.9; Hobbes *Leviathan* chaps. 6 end, 4 end, *De Cive* “Author’s Preface to the Reader”; Descartes *Discourse on Method* I.6–8, III.23; Locke *An Essay Concerning Human Understanding* I.iii.3–7; Spinoza *Political Treatise* I.1).¹⁹ Yet, utopian as it admittedly was (*Republic* 592a10–b4), that tradition was not unaware of the harsh experiences to which this objection would later refer. The deliberations that prevented its founder from engaging directly in politics, for example, were so far from being naïve that they could even be called Machiavellian (compare Machiavelli *Prince* XV with *Apology* 36b5–9, *Republic* 496c8–e2 as well as with *Phaedo* 89d6–90b3). But what, then, if not mere naïveté, prompted Socrates to look at man from the point of view of what is said about what man ought to be, or his purpose or perfection?

Of the one or two considerations that may have pushed Socrates’ thought in this direction, there is first of all the fact that, for all our harsh experiences to the contrary, we are occasionally at least afforded the deeply moving spectacle of a deed that does appear to measure up to the perfection we believe we find in speech. To remind us of this, we are afforded just such a spectacle now, in the form of Socrates’ own deed, a deed of which we, as readers, “hear.” For Socrates’ sitting or his acceptance of death is admired as a thing of beauty (nobility) (cf. 58e1–3, 116b8–c6). The contemplation of it brings, not only to his friends or companions, but also to readers of Plato’s dialogues through the ages, a certain strange pleasure (57a5–6, 58e1–59b1). The righteousness, the lasting splendor of Socrates’ deed shines forth in large part because Socrates knowingly accepted his ruin. In paying the penalty imposed on him by the city, he appears to have chosen justice for its, not merely his, own sake; and this was the “nobler” choice. Or, to put this the other way

round, had Socrates escaped to Thebes or Megara (*Crito* 53b4–5) or Thesaly (53d1–4) in a mercenary bid to save himself, deserting the post assigned him by the city and its laws (54b3–d1), would he not have debased himself somewhat in our eyes?²⁰ He, for one, thought he would (53a7–8, 53b5–54a2). And does Socrates' own deed not go to show, therefore, that the aspirations or ends disclosed in speech may occasionally at least be realized in or by the deeds of men? (Consider Strauss 1952b, 70.) If it does, then the deeds may not be so at odds with the speeches after all. The deeds seem to provide some evidence at any rate that a positive answer to the crucial question, the question of "the effectual truth" of justice or nobility, is only for the most part, not always or necessarily, unwarranted.²¹ On the other hand, it is hard to deny that, for the most part, if not always, the deeds do not appear to measure up to the perfection we believe we find in speech. "Virtue exists in most cases, if not all cases, as an object of aspiration and not as fulfillment. Therefore, it exists in speech rather than in deed."²² But what of it? If Glaucon's response to this situation is any indication (see *Republic* 358b7–c6, 361d4–e3, and 367e6–368b3 in context) someone may be, so to speak, "taught" by harsh experiences that this is the case and bravely refuse to accept a negative answer to the crucial question all the same.²³ Evidently, the habitual deficiency of the deeds is mitigated, or need not be regarded as necessary or essential to them, so long as it is conceived of on the model of the flawed embodiments (in sand or on paper, say) of fundamentally flawless mathematical and geometrical objects (73a7–b2, *Republic* 510d5–511a1)—that is, as a consequence of the deeds' failure to measure up to the perfection we believe we find in speech (cf. *Republic* 473a1–3 in light of 472b3–e6, 479a5–b2, and 592a10–b4).²⁴ Accordingly, either because the deeds do occasionally at least appear to measure up to the speeches, or because, even if, as far as we can see, they do not, this does not decisively affect the question of the possibility or nobility and goodness of their doing so, or for a combination of these two considerations, it would be naïve to suppose that an appeal to the deeds proves by itself that the speeches are incredible, or that the aspirations revealed in them are not and can never

be realized. Rather, “to portray something in its highest possibilities,” that is, in speech, “is inevitably to delineate at the same time its limits or limitations.”²⁵

So as not to put the cart before the horse, then, a proper assessment of the deeds, of the furthest limits of their grasp, cannot be undertaken until an examination of that peak that, it is said, they ought to reach out for has been successfully carried out. But, granted that Socrates’ approach was prompted by his recognition of this unavoidable priority of speech to deed, and not by mere naïveté, it could still appear from the outset to have little, if any, prospect of making headway. For, to come now to another, closely related and yet more fundamental objection, the opinions or speeches that form the starting-point of that approach remain universally ambiguous or controversial. To say nothing of the noble (beautiful), the good, the pious, and their opposites, it is so far from being revealed to the eyes or senses what justice as opposed to injustice is, or whether one and the same thing is just or unjust, that the identity of such things is the subject of endless dispute, even among human beings whose senses are in good working order (*Republic* 523a1–524d6, *Statesman* 285d9–286a7). And these disputes or controversies, which are of such importance to human beings that they have never ceased to give rise to life-and-death struggles among individuals as well as communities, arise because opinions or speeches about justice and injustice, as opposed to opinions or speeches about such things as iron or wood, contradict one another (*Alcibiades* 111b11–112b9, *Phaedrus* 263a2–b1, *Euthyphro* 7b6–d8, *Hippias Major* 294c8–d3). In the representative case at hand, for example, no controversy surrounds the question whether Socrates is in fact “sitting.” This, it seems, is plain enough to the eyes. And yet, since justice is identified in speech, not only with what is “nobler” but also with what is “better” for its possessor than injustice, the justice even of that “sitting” is evidently not so unambiguously pure or free from deficiencies as to be noncontroversial (63a4ff., 69d7–e4, 58e4–59a1, 118a17, 116b8–c8; *Seventh Letter* 324e1–2; *Crito* 45c6–9). Even if the presupposition or implication capable of removing the ground of the deficiency, namely, divine justice,

is conceded (and the eventual prosperity of the righteous thereby assured),²⁶ the deficiency still runs the risk of enduring on the other, above-mentioned grounds. And so we are left wondering, in view of this changeability, whether the existence of justice as an object of aspiration is conceivable on the model of the mathematical or geometrical objects after all.

That said, the contradictions that afflict its starting-point are not necessarily objections to Socrates' new approach. In the very changeability of opinions or speeches about moral-political things we discover a burden, which weighs on us more the more clearly we grasp it, to ascend somehow to a sufficient, unchangeable starting-point or beginning. From the question of the factual starting-point, of the evidence by which the Socratic method first orients itself, we are accordingly led, by way of the contradictions that turn out to afflict it, to the question of how the method critically examines or treats that evidence. How does it do so, that is, in such a way as to come to something sufficient?

The Rhetorical Procedure of Socrates' Second Sailing

For the moment at any rate Socrates addresses this question in few words. What he says would seem to indicate some concern on his part with consistency. For, in the case of each of the beings—as we have seen, he singles out cause—he sets forth by hypothesizing the “speech” or “account” (*logos*) about it that he determines to be “strongest,” and he lays down as being true what seems to him to be in harmony or consistent with that account, but what does not seem to be consistent with it, as not true (100a3–7). But what is the meaning of that concern? While Socrates lays down as true (false) what is consistent (inconsistent) with the hypothesized account he determines to be strongest, the criterion according to which he determines an account to be strongest, the criterion on which everything else depends, remains utterly obscure. And, in thus measuring everything else, the true as well as the false, by the account or

hypothesis that best satisfies a criterion he allows to remain utterly obscure, he allows everything else, too, to remain in a state of obscurity. Socrates starts here with the roof. He has asserted that there is, in the final analysis, a strongest hypothesis or account that, in each case, serves as a touchstone—whatever it, and its touchstone (criterion), may be—that can make fully transparent what is said truly or falsely about the beings, in particular, about cause. And, for the moment at any rate, he has left it at merely asserting this.²⁷ But what makes a speech or account, whether it pertains to cause or to justice, for example, “strongest” in the first place?

Looking ahead, we see that Socrates will go on to give an account, of sorts, of the description in question now (100a7ff.), an account whose alleged purpose is to make that description more clear or transparent to Cebes (100a7–8), who did not understand it. And so we would naturally expect it to cast light on what in Socrates’ description stands most in need of illumination: the criterion used to determine or assess the strength of a hypothesis or account. But in that “explanation,” if such it really is, Socrates does not in fact do this, at least not directly or immediately. Instead, he puts on display (100b3, 100b8)—for the first time, and only after his intellectual autobiography proper has come to a close!—the hypothesis of the separate ideas or forms (100b3–7), which is a hypothesis or account “about cause” (cf. 100a6 in light of 101c4, 101b5–6, 100d4–6, 100c4–8, 102b1–3 as well as 100a3–6, 100b5–7, 101d2).²⁸ The substance, the content of this hypothesis hangs by a mere thread to Socrates’ developed thought. Socrates has come to recognize the primacy of form—of, that is, the character that qualifies a given perceptible being for inclusion within a class. And the hypothesis of the separate forms builds on this recognition. But what it adds to it is that the form, the class-character is itself an eternal, unchanging thing or being (78c10–d7) of exemplary perfection (74a9–c5, 74d4ff., 100c4–5) existing in its own right, separate and apart from the perceptible beings or things (100b5–7, 74a9–12) whose relatively imperfect forms (see, again, 74a9–c5, 74d4ff., 100c4–5) are somehow bestowed on them, sustained, and removed by its own changes

(102d5–103a2). And these additions are rather incredible. However, the fact remains that if Socrates really thinks that the substance, the content of this account of cause satisfies the criterion of strength, whatever it may be, he might still illuminate that criterion to some extent here, albeit indirectly: by putting the manifestly strongest account or hypothesis about cause on display. Socrates could, then, still cast light on his description of the relevant feature of his second sailing. Does he really think this, however?

From the very beginning, it is obvious to his listeners, a group in which we may also include most scholars, that he does accept the hypothesis of the separate forms.²⁹ This is by now a widespread belief, for which he surely bears full responsibility (see 100b5). For precisely this reason, however, his intellectual autobiography's complete silence on that hypothesis can hardly have escaped anyone's notice.³⁰ A discrepancy, a gap was opened up. Socrates' own statement of his thought seemed to diverge from what is widely believed about it (100b1–3). As if by way of responding to this situation, Socrates hastens to display the separate forms. He does so in the context of an attempt to put on display the kind of cause with which he, or his method, is concerned (100b3–4) or the strongest account of cause. And this display, which comes better late than never, closes the gap to the satisfaction of his listeners at any rate. It leaves them with the same impression they had from the first, too: "obviously," Socrates thinks the hypothesis of the separate forms is the strongest account of cause.

On the other hand, his listeners are men of limited mental capacities (102a4–10).³¹ And this is perhaps why they remain totally oblivious to the fact that, where the hypothesis of the separate forms does not hang by a mere thread to Socrates' developed thought, it contradicts it. It is widely believed, to repeat, that the hypothesis of "the cause" Socrates hopes to display to Cebes (100b8–9), the hypothesis of the separate forms, is the same as "the kind of cause" with which he is himself concerned (100b3–4) or the strongest hypothesis or account "of cause" (100a6). But the separate forms are a cause of generation and corruption (101b10–c9, 100d5),³²

and has Socrates not already given up on finding that cause? In the same vein, were not the forms as Socrates understood them so far from existing separate and apart from the perceptible things that they proved, on the contrary, to be inseparable from them? The cause Socrates hopes to display to Cebes may not be the kind of cause with which he is himself concerned or the strongest account of cause after all. Indeed, Socrates' last word on the matter suggests that it is not (compare 100b1–c2 with 107b4–6).³³ Taking our cue from these complications, as long as we for our part refuse to surrender to the first impression created by the display Socrates gives here, we may even find that so far from shoring up the doubts on this score that his last word suggests, it deepens them; and that, in deepening them, it calls its own, explanatory purpose into question.

According to what Socrates says in the first part of his display (100b1–c8), he cannot actually display the cause (of generation and destruction) except on the express condition that Cebes is willing to take the causality of the separate forms for granted (100b7–8). That means, as regards the existence of the cause he is hoping to display, Socrates' procedure begs the whole question. After all that we have seen of Socrates' outstanding dedication to scientific rigor, this concession to dogmatism, to irrationality, is startling.³⁴ Still, the condition is easily, much too easily, met. Without a moment's thought, and without carrying out any assessment whatsoever of the strength of the hypothesis or account, Cebes grants the separate forms (100c1–2, 100c8)—both that they are (perfect) (100b7–c2, 102a11–b1) and that they are causes (100c3–8, 102b1–3). But why is this? It seems the unwarranted ease with which he does so may have to be traced, as Cebes' response indicates, to the keenness of his interest in the discovery that he has been led to believe may be made at the conclusion of Socrates' account (100c1–2). And this is not altogether surprising, for Socrates has led Cebes to believe that, so long as he takes the separate forms for granted, they may discover nothing less than the immortality of the soul (100b7–9).

Socrates' first, merely explanatory purpose—to make his second sailing more clear or transparent—has therefore been combined, all of a

sudden, with a new and distinct one: the discovery, on the basis of Cebes' concessions, of the soul's immortality.³⁵ However, since the new purpose has itself turned out to constitute, in what amounts to a mockery of Socrates' lifelong dedication to scientific rigor, the separate forms' only discernible ground, it has become much more difficult to fathom in what way displaying them could contribute to the first, merely explanatory purpose. So far as we can see from the display's first part, that is, the separate forms are accepted for no other reason than to lay a basis somehow for the discovery of the soul's immortality (100b7–9). But, if the hypothesis of the separate forms has to be taken for granted, if it does not manifestly satisfy any criterion of the strength of an account (of cause), how could a display of it illuminate that criterion even indirectly? On the other hand, if the separate forms do not contribute in this way to the first, merely explanatory purpose, what is their true purpose here? This question is further complicated by the fact that, since they have no rational ground, and since the hoped-for discovery is only as sound as its basis, they can hardly serve the new purpose either.

The impression that Socrates' listeners have of the separate forms points to an answer. Cebes—who is to be taken as a representative of listeners of limited mental capacities everywhere (102a4–10)—retains in the face of all of this the unquestioning and, to his mind, unquestionable impression that Socrates regards the separate forms as the strongest account of cause. And we may now add that, besides encouraging this impression in him, Socrates has also led Cebes to believe that this kind of cause lays a basis somehow for the discovery of the soul's immortality. By doing so, Socrates strengthened his expectation that the hope for the good (immortality), on one hand, and the desire for science (knowledge of the cause), on the other, can be fully satisfied at once (see 62c9–63a7). Is Socrates' recourse to these rather incredible causes perhaps a rhetorical consequence of the fact that his explanation of his second sailing in search of the cause has suddenly been co-opted to support, by seeming to rationalize, the “beautiful hope” (70b1) of his listeners for immortality?

In the next part of his display (100c9–e4), Socrates admits that the hypothesis of the separate forms is not seriously, but only “simply and artlessly (unskillfully) and maybe foolishly,” held by him (100d3–4).³⁶ This is in accord with the fact that he did not give Cebes any good reason to accept it. Perhaps he could not do so? At any rate, immediately after rejecting without argument some other account (100c10) about cause, about causes he calls “wise,” on the by now familiar grounds that he does not understand it (100c9–d3, compare 99c6–9),³⁷ he makes use of a “formula used in public prayers . . . [which] arose from fear that the gods should be addressed by the wrong name,”³⁸ to acknowledge openly that he does not actually understand and cannot “confidently affirm” (a term he always uses to convey his ignorance of the gods and their doings: 63c2, 114d1)³⁹ how the separate forms are to be addressed as causes either (100d4–7, and compare above all 100e5–101b7 with 96d8–e7). And it follows from this that, to be consistent, he would have to reject them, too. That Socrates does not reject them, despite not understanding them, could seem to find ample support here; above all, in his repeated, if admittedly unfounded or arbitrary insistence that “each of the beautiful (noble) things becomes beautiful (noble) by beauty (nobility)” (100d7–8, following manuscript B at d8, 100d4–5, 100e2–3).⁴⁰ Yet he insists on this account of cause in the process of giving as his sole reason for holding on to it that it is “safest” or “safe,” in his opinion, both for himself and for another, to do so (100d8–e3). The “safest” account is not necessarily the “strongest” one, however. And, inasmuch as Socrates holds on to the hypothesis of the separate forms, a hypothesis whose substance, whose content is not actually intelligible to him, out of a concern for his own safety and for the safety of others, it is an indication of his prudence and justice; not, however, of what he himself regards as the strongest account of cause.

The problem of the hypothesis’ basis is, for our present purposes, more relevant than the problem of the substance, the content of the hypothesis itself. With regard to the first problem, it should come as no surprise at this point that the case Socrates makes on behalf of the

separate forms in the third and final part of his display (100e5–101d3) does not rest on the basis of any line of reasoning. At bottom, it rests on Socrates' warning, which has no bearing whatsoever on the truth of the matter, that the alternative to holding fast to the separate forms is exposure to some unidentified "terror" or "fear" (101a5, 101b2, 101b5, 101b8, 101d1). This fear, whatever exactly it is a fear of, and the response to it that Socrates prescribes (holding fast to the separate forms) are both treated here in relation to Cebes' peculiar needs and capacities. That is, Socrates narrowly limits the reach of the case he makes on behalf of the separate forms to why and how "you"—not "I," Socrates, or even "we" two, but "you," Cebes (100e5–101d3)—should hold on to them. And he thus exhorts others of limited mental capacities generally to suppose they know what he, for his part, is far too capable to suppose he knows (compare 100d4–7 with 101c2–4). To be more precise, he exhorts them to suppose they know that one or another of the separate forms is the cause responsible for making one man bigger than another, ten more than eight, and two cubits more than one cubit (100e5–101b7). The very things that, by his own admission, Socrates himself does not suppose he knows the cause of (96d8–e7)!⁴¹ But Socrates seeks, by carrying on in this way, to allay their still unidentified fear. And to this extent he holds on to the separate forms out of a (just) concern for the safety of others.

What, then, is its relation to his (prudent) concern for his own safety? We know as a matter of fact that Socrates' conversational method tended to enrage those who encountered it in one way or another (*Apology* 21b9–e1, 22e7–23a3, 28a6–7).⁴² And, in light of the hope for immortality that Socrates' explanation of his second sailing has been co-opted to support, the unidentified fear may just be the absence of such hope (cf. 69e5–70b5, 77b1–10, 77d5–e3, 87e5–88c7). Did Socrates' genuine, dialectical method somehow expose others to the fear of death, or damage their hope for immortality, to such a degree that had (Plato's) Socrates neglected to make a specific rhetorical effort to allay their fear, or to support their hope, he would have pained and enraged those who encountered it, even to the point of endangering himself (and all he stood for)? If so, the

separate forms would keep Socrates safe, too—albeit from a different danger than they would save others from.

At the conclusion of the display of the separate forms Socrates abruptly shifts gears. Compared both with the description that ensues (101d3–102a1) and with the one that precedes it (100a3–7), the intervening display appears as a digression or an interruption rather than an explanation of what came before. Although he does not acknowledge this in plain terms—that would defeat his rhetorical purpose—it is sufficiently clear that “Socrates here resumes his comments on hypothetical method, *interrupted* since 100a.”⁴³ For one thing, he suddenly reinstates his earlier silence on the separate forms. For another, throughout the digression itself Socrates had exhorted Cebes “to hold fast to,” “to cling to” the account of the separate forms. And that meant, in context, to maintain the account dogmatically, irrationally; neither giving reasons for it, nor responding to questions about it. Now, just as suddenly as he reinstates his earlier silence on the separate forms, Socrates completely reverses course on this question, too (100d3ff.). He rejects (101d3, 100d2, 101c8) any account or speech that someone maintains in the way in which he had just a moment ago exhorted Cebes to maintain, in particular, the hypothesis of the separate forms (compare 101d2 with 101d4 and see 101c4, 100d4, 100d9 as well)! This shift is so abrupt that it has led editors and scholars who find it “startling”⁴⁴ and even “outrageous”⁴⁵ to venture, without any manuscript authority whatsoever, to alter the text in order to remove it.⁴⁶ As the text stands, it implies that a clear distinction must be drawn between what he has only just publicly exhorted Cebes to do and Socrates’ genuine, dialectical method. And for most scholars, as well as for Cebes and his like, such “bad manners” are beyond the pale. From our perspective, in contrast, it would be quite “startling” precisely if this sudden reversal did not take place. In exhorting his listeners to cling dogmatically, irrationally to the hypothesis of the separate forms, Socrates made a mockery of the outstanding dedication to scientific rigor responsible for every step forward in his thought so far (cf. 84a7–b1, *Crito* 46b4–6). The sudden reversal goes to show or confirm, however, that this

exhortation does not actually constitute such a startling farewell to reason. Socrates does not practice what he preaches.

It is fitting that just as he reinstates his earlier silence on the separate forms and reverses course on the question of “clinging,” Socrates turns his attention away from Cebes, as well, toward a far more exacting audience. While Socrates does continue to limit the reach of the case he makes—this time, on behalf of the “hypothetical method” as opposed to the separate forms—to what “you,” Cebes, should do, he now inserts the condition, which Cebes is not even close to meeting (cf. 63a1–3 in context as well as 64a4–9), “if in fact you want to discover any of the beings” (101e2–3), or “if in fact you are one of the philosophers” (101e6). In the ensuing description, then, Socrates no longer exhorts listeners of limited mental capacities to accept a dogmatic, arbitrary, and yet salutary doctrine (about the cause).⁴⁷ Instead, he resumes his original description of his genuine, dialectical method with an eye to those potential or actual philosophers who share something at least of his outstanding dedication to scientific rigor.⁴⁸

The hypothesis of the separate forms was, we have suggested, a rhetorical answer to the question of the cause (of generation and corruption) somehow meant to give the semblance of scientific support to the hope of others for immortality and to keep Socrates himself safe from the anger of those whose hope his genuine, dialectical method would damage. This does not necessarily mean that, contrary to Socrates’ own indications (100b3–4), the display of that hypothesis was *merely* rhetorical. Presumably, Socrates rejects the hypothesis of the separate forms because its substance, its content does not satisfy the criterion of strength of an account (of cause), whatever it may be. And this leads us to suggest, in the second place, that a display of the separate forms might still illuminate that criterion to some extent here, albeit indirectly: not by manifestly satisfying it, but rather by manifestly failing to satisfy it. In that case, by serving both a rhetorical as well as an explanatory purpose, the intervening display would “kill two birds with one stone.” In their current state, however, these suggestions are too undeveloped, too full of holes to

carry much weight. To fill out the former suggestion it would be necessary to grasp at long last how exactly the hypothesis of the separate forms supports the hope or allays the fear surrounding death—or, to put this the other way round, how exactly Socrates' dialectical method damages the hope for immortality, or entails exposure to the fear of death. And, as for filling out the latter suggestion, once the dialectical method has already been described and the criterion of strength of a hypothesis is solidly within our grasp, this would follow from a subsequent review of the substance, the content of the hypothesis. Either way, a close look at Socrates' ensuing description (101d3–102a1) is in order. For, there, in view of the safety conferred on himself and others by his largely rhetorical answer to the question of the kind of cause with which he is concerned, Socrates resumes his original, serious description, which he first began at 100a3–7, of his dialectical method.

The Procedure of Socrates' Second Sailing

Because the whole of Socrates' serious description is divided up into two passages, "Our problem," as Hackforth puts it, "is to relate the first passage to the second, to see how the two together do, for all their brevity, describe something . . . deserving to be called a method."⁴⁹ And, unless we miss our mark, that "something" has to be the very thing we find Socrates practicing throughout the Platonic dialogues. Socrates' original description, we recall, started with the roof. He asserted that there is, in the final analysis, a strongest hypothesis in the case of each of the beings, a hypothesis that serves as a touchstone capable of making fully transparent what is said truly or falsely about them. But he left it at merely asserting this, without illuminating the criterion of strength of a hypothesis or speech. Here, in contrast, Socrates starts with the flooring, the foundation—that is, the criterion of strength of a hypothesis or speech.

As the preeminent member of the group he addresses here (101e6, 101e2–3), Socrates indicates that he himself would not, in giving an

answer to the question of what something is, cling to one or another hypothesis about it until he had carried out a rigorous examination of its consequences (101d3–5). What such an examination seeks to ascertain is whether the consequences of the hypothesis or definition, which Socrates takes as his “starting-point” or “beginning” (compare 101e1–2 and 101d3–5 with 100b5 in context), are consistent or inconsistent with one another (101d5–6). And it seeks to ascertain this through a process of question and answer (compare 78d1–2, 75d2–4 with 100b1–3 and see 100d9, 100e2, 101c9, 101d3, 101d4) or through conversation (101e2) or rather, since thinking is conversing with oneself (*Theaetetus* 189e4–190a7, *Sophist* 263e3–9), through thinking so understood. A definition or a universal hypothesis—for example, it is just to return what is owed—may have something particular as its consequence—it is just to return an axe to a madman—which, as a simple question may go to show, cannot be consistently maintained (*Republic* 331c1–d3).⁵⁰ And this is liable to have its cause or source in a contradiction or complication within the more universal hypothesis itself, a contradiction that results in contradictory consequences. The examination of the latter would therefore serve, above all, to uncover and bring to light contradictions buried within the original hypothesis.⁵¹

Now, if a contradiction is uncovered, the outcome is clear. The whole of the original hypothesis breaks apart, in that case, into two mutually exclusive parts or hypotheses—it is just, for example, *either* to return what is owed *or* to benefit others (*Republic* 331c1–d3). Awareness of the contradiction acquired through conversational examination brings with it awareness of the necessity to give a, that is, one (cf. 101e3–4), speech or account (*logos*) of the nature of the being concerned (101d6). And so by way of responding to that necessity, Socrates hypothesizes another hypothesis (101d6–7). That is to say, of the two “higher” hypotheses into which the original hypothesis broke apart upon examination, he hypothesizes the one that appears better and, in maintaining it altogether strictly, he discards the other (101d6–8). Each of the two parts is higher, “i.e. more universal,”⁵² than the original hypothesis, in which both are entangled, in

that each part necessarily comprises a class by itself apart from and beyond, yet encompassing, the class, insofar as it is a class, comprised by that peculiar entanglement.⁵³

As Socrates describes it here, then, his approach has two stages. An effort to uncover contradictions within a definition or hypothesis (101d3–6) is followed up, when one is uncovered, by an effort to extricate oneself from it; specifically, by strictly maintaining one part of the contradiction and jettisoning the other (101d6–8). Next, if need be, Socrates repeats the process. He reapplies the approach on the higher, more universal level of the part of the self-contradictory hypothesis that has, in each case, been retained by him “until” he arrives at a “sufficient,” noncontradictory (101d8) and thus all but irrefutable (85d1) speech or hypothesis.⁵⁴ Socrates’ method accordingly involves, more generally speaking, a stepwise ascent from a factual but insufficient starting-point or beginning to a sufficient one. This way of putting the matter, which emphasizes the method’s positive result, runs the risk of downplaying its negative or critical repercussions. But the ascent proceeds, to say it again, by uncovering contradictions within the hypotheses from which it starts or begins (101d3–6) and then, in response to this, by retaining one part, in each case, of the recently uncovered contradiction and discarding the other (101d6–8). In other words, it has the effect of invalidating and “destroying the hypotheses” that constitute its starting-point or beginning (*Republic* 533c7–d3), leaving in its wake only their parts, or parts of their parts, intact.

So much for the flooring. By starting from it here, Socrates has illuminated what he allowed to remain utterly obscure in his description of the roof: what makes a hypothesis or an account “strongest” in the first place. Mundane as *the manner in which* (in addition to *what*) Socrates examines the speeches may seem, the principle of noncontradiction, it turns out, is *the* criterion of the strength, the sufficiency of a hypothesis or speech.⁵⁵ And yet in casting light on this he allowed something else to remain in a state of obscurity. For of the two more universal hypotheses or speeches that are left intact in the wake of an examination that

uncovers a contradiction within the original hypothesis, how does Socrates determine which speech to retain and which to discard? This determination does not automatically follow on the recognition of the contradiction as such. By his own account, Socrates maintains whichever one appears “better” (101d8, cf. 85c9). All right, but what is the meaning, the criterion of “better”? While Socrates’ second description of his dialectical method has resolved a difficulty with the first, it has done so at the cost of introducing a comparable difficulty of its own. Perhaps, however, the obscurity that surrounds the second description can be removed by recourse to the first, just as the obscurity surrounding the first description was removed by recourse to the second?

Socrates means by the “strongest,” the “sufficient” account the one that, whether it pertains to cause or to justice, for example, can be maintained without contradiction. It has to be reached gradually, as we saw, by ascending stepwise from an insufficient but factual starting-point or beginning to a sufficient one. But because the description of the roof appeals to this, to the “strongest” account, from the outset, it presupposes that this examination or ascent has already been carried out! So what it must mean is that *after* having carried out that examination or ascent, with a view to some being or other, Socrates subsequently lays down as being truly spoken of that being’s nature whatever is consistent with its positive result, but as not truly spoken what is not consistent with that result (100a3–7). The positive result or the sufficient beginning serves as a touchstone capable of making fully transparent, if only in retrospect, which of the two parts or speeches of each lower, less universal contradiction is the true or the “better” one to be retained. And those parts or speeches, along with the highest one, which is the result itself, constitute *the* account (or definition) of the thing concerned. The motion of dialectic is, in other words, twofold or circular: a descent follows on and complements the ascent.⁵⁶ And, as we can now see, it was only in order to draw our attention to the twofold, circular motion of dialectic that Socrates divided up his description of it in the way that he did.

What follows from this description? If indeed the partial truth or

truths contained in the dialectical ascent's insufficient, factual beginning are made fully transparent as such, and consequently salvaged, only after the ascent has actually been carried out, the ascent is bound to be a gradual, a somewhat wavering, and perhaps even a faltering one. For prior to its being carried out, the determination on which the ascent's success depends, the determination as to which of the two contradictory parts or speeches is, in each case, the "better" one to be retained, necessarily concerns what remains less than fully transparent. A lack of transparency in the higher, more universal case or cases inevitably deprives the lower, less universal case or cases of at least some transparency. Still, it does not follow from this that, starting from the factual beginning, there is no prospect of making headway. The recognition of the insufficiency, the changeability of the factual beginning, on one hand, together with the dim or partial awareness that all human beings always have of the true and sufficient beginning, on the other, may in some cases be enough to push and to pull, respectively, thought upward.⁵⁷ With the peak reached at last, looking back down at the path that was scaled in almost total darkness, the way up is seen, truly seen, for the first time in broad daylight.

Socrates' first description (100a3–7) has, in the end, combined with his second (101d3–102a1) to "describe something . . . deserving to be called a method."⁵⁸ (As it happens, that description as a whole is, as scholars frequently suggest, compatible with what Socrates says of his "hypothetical method" in book 6 of the *Republic* as well.⁵⁹ There, too, dialectic is said to ascend from an insufficient but factual beginning or starting-point to a sufficient one [510b2–511b7; 533b1–d3]. And from that sufficient starting-point it is said to descend again, laying hold of "the things that follow on it" [511b7–c2]. In descending again, to put this last step in more recognizable language, dialectic retains that part of each lower, less universal contradiction whose truth has been made fully transparent in retrospect by the fact that it follows on or is consistent with the "strongest," the "sufficient" account.) At the same time, if "something . . . deserving to be called a method" has indeed been described, it

has been described rather too abstractly. And it is perhaps not enough to describe the manner in which dialectic asks and answers questions of the type “what is x ?” in such general terms. For the sake of clarity, at any rate, a question of that type actually needs to be put to one or two of the beings; the dialectical method actually needs to be applied.

And yet, on the other hand, has this need not in a way already been met? A concrete example is ready at hand: most of Socrates’ intellectual autobiography has, after all, boiled down to a dialectical, “cross-examining analysis” of cause. And so to see the dialectical method actually applied to one of the beings we need only pause by the way and recall, in light of what has come to sight in the meantime, what went into that earlier analysis.⁶⁰ Somewhere along the way, it is true, the dialectical method was applied to justice, too. Yet it was applied, so far as it was, not only as an aside but also only to the point of uncovering the problem of law. And this left us in a state of some uncertainty. For to truly solve that problem, to put a stop once and for all to our wavering as to which of the two possible solutions to it is “better,” the dialectical examination of justice has to be carried out, according to the description given of it above, all the way through to its end. Accordingly, both to continue to compensate for the lack of clarity that tends to accompany abstract description and, what is more, to press onward with an examination whose bearing on Socrates’ overarching goal we have already come to suspect, we must pick up the application of Socrates’ dialectical method to justice where we left it.

What Is Justice?

With the dialectical method described and the criterion of strength of a hypothesis solidly within our grasp, it is now possible to return to, so as to fill out, the two suggestions that had to be left in an undeveloped state by us earlier. What we suggested, in the first place, to recall, was that the hypothesis of the separate forms is a rhetorical answer to the question of

the cause (of generation and corruption) somehow meant to give the semblance of scientific support to the hope of others for immortality and to keep Socrates himself safe from the anger of those whose hope his dialectical method would damage. Yet we stopped short of saying that the display of that hypothesis was *merely* rhetorical. For, as we noted, if Socrates rejects the hypothesis of the separate forms, then he presumably does so on the grounds that its substance, its content does not satisfy the criterion of strength of an account. And so we suggested, in the second place, that Socrates might still illuminate that criterion in some way by displaying a hypothesis, for instance, the hypothesis of the separate forms, that manifestly fails to satisfy it. Let us begin with the second of these two suggestions, which, when fully developed, will prepare us for a development of the first. And for reasons that will become clearer as we proceed, it will prepare us to take up again the question of justice, too.

According to the substance, the content of the hypothesis of the separate forms, the form is much more than the character of a class of beings. It is itself a perfect, particular being in its own right; a being that is, despite being unchangeable, somehow responsible at the same time for “making” (100d5) and unmaking the things as we already know them. Of the many difficulties bound to affect a hypothesis about cause that is not consistent with the fourfold division of the causes,⁶¹ Socrates calls special attention to one of them here. As was suggested, what Socrates says on behalf of the separate forms comes down to no more than this: that the alternative to accepting them is, ultimately at least, exposure to the terror or fear of death. But, according to Socrates’ most specific statement of the matter, the fear has its more immediate basis in two consequences, fear-inspiring and even “monstrous” in themselves (101b1), that follow from the rejection of the separate forms (101a5–7). What he says follows from the rejection of the causality of, for example, “the big [itself]” (102d6, 65d11–e6, 100b4) is, first, that of two men (or things more generally) the bigger one would be bigger, and the smaller would be smaller, by the presence of one and the same thing, such as, say, a head (101a7–8); and, second, that the big or bigger man would be big or bigger by something,

such as a head, which is itself small (101a8–b2). If the alternative or “contrary” (101a6) account (to that of the separate forms) inspires fear owing to the fact that either or both of these consequences follow from it, the hypothesis of the separate forms is, for its part, *not* fear-inspiring precisely insofar as those consequences are forestalled by it. As that hypothesis would have it, then, what is responsible for making the big or bigger (thing) big or bigger does not also make the small or smaller (thing) small or smaller; and, in addition to this, that very thing, which makes the big or bigger (thing), is itself a perfectly big thing (100e5–101b2).⁶² These two features of the separate forms are the same ones we have distinguished elsewhere in other words—the separate form is *both* a cause (of the things, as we already know them, of its class) *and* a particular, perfect exemplar (of the class of the things whose cause it is). And what we are especially encouraged to see just now, not only through Socrates’ specific statement of the matter, but also by means of other indications that he gives in this context,⁶³ is that these two features contradict one another.⁶⁴

For example, to return to the case of bigness, if “the big itself” is indeed a perfectly big being, then are not all other beings rendered small or smaller in comparison with it (see 102b3–d4)? The hypothesis that the form is a separate being of exemplary perfection means that the form is, in each case, so far from being a cause of the many, merely perceptible forms that, so to speak, “participate” in it that it actually negates them or deprives them of their (or its) character. The thought of the causality of the separate forms cannot be coherently combined with the thought of their perfection.⁶⁵ As this incoherent combination of mutually exclusive elements or parts, the hypothesis that there are such causes or beings fails to satisfy the criterion, to which Socrates’ genuine, dialectical method appeals, of a sufficient account. In this way, then, through his display of a hypothesis or account (of cause) whose substance, whose content is manifestly unintelligible, Socrates did indeed, as we suggested earlier, illuminate in some way the criterion he had initially allowed to remain utterly obscure.⁶⁶

But, to say it again, Socrates recommended the hypothesis of the separate forms to Cebes, for one, for its ability to allay the terror or fear (ultimately, of death) to which he might otherwise be exposed (see again 101a5, 101b2, 101b5, 101b8, 101d1). If that hypothesis is not even coherent, it can allay that fear only for as long as and to the limited extent that its radical insufficiency does not make itself visible—hence, never permanently or fully (cf. 90b6–d7). Inasmuch as we have already come to see its insufficiency, we should hardly be able to avoid a reckoning with the unalleviated fear itself. And yet, at first sight, Socrates' insistence that the rejection of the separate forms entails exposure to fear appears totally incomprehensible. A telling sign of this is the fact that, faced with Socrates' first insistence that it does, Cebes cannot help laughing (101b3).⁶⁷ We are tempted to join in. Fear of what does not appear truly fear-inspiring is the stuff of comedy. And there is nothing truly fear-inspiring about the two consequences that, Socrates says, follow from the rejection of "the big itself." The first was, to repeat, that the thing which enables the man to whom it is present to be bigger than another, smaller man is the very same thing whose presence also enables him to be, in relation to an even bigger man, the smaller of the two (101a7–8). As for the second, it amounted to the equally plain truth that the thing which enables the man to whom it is present to be bigger than another, smaller man is itself, relative to the man himself, small or smaller (101a8–b2). And, as we may recall, these consequences about the relational character of bigness are, in addition to being plain as day, effectively restated by Socrates shortly after this as if they were shared by him, too (compare 102b3–d4 and see also *Republic* 523a1–524d6 and *Theaetetus* 154c1–155c10). For he will go on to say that Simmias is big (in relation to Socrates) and yet, at the same time, small (in relation to Phaedo)—and we ourselves may add, in keeping with this account of the relational character of bigness, that the thing whose presence enables Simmias to be big (in relation to Socrates) is itself small (in relation to Simmias). Again, these things are plain as day: bigness is undeniably relational (*Republic* 523a1–524d6, 479b6–7, 438b4–13).⁶⁸ And in the process of effectively restating the consequences that

follow from the rejection of the causality of “the big itself” here, and doing so, moreover, as if they were his own view, Socrates gives no indication whatsoever that they are or should be fear-inspiring. What then could induce him to insist, laughably, in recommending to Cebes the alternative that would forestall them, that they are?

A solution begins to emerge when we remind ourselves of Socrates’ outstanding ugliness (*Theaetetus* 143e7–144a1, *Symposium* 215b3–6; Xenophon *Symposium* 4.19). He is not only smaller but also uglier than Simmias, on one hand, and Phaedo, on the other. Phaedo appears to be outstandingly beautiful (89a10–b5). Does, then, the relation that holds among the three men in regard to the degree of their bigness, with Simmias lying somewhere in the middle between two extremes (102b3–6), hold in regard to the degree of their beauty as well? If it does, what Socrates says about the relational character of bigness may be taken to apply to beauty, to bodily or apparent beauty (100c10–d2, 78d3–e2), as well (*Hippias Major* 288e6–289d5). The application of Socrates’ remarks to beauty, which is only playfully or gently encouraged by these observations, is made compulsory in another way. Socrates began his display of the separate forms by speaking not of “some big [itself]” (cf. 102d6, 65d11–e6) but of “some beautiful itself by itself” (*to kalon*) (100b4–e4)—by which he means, to be precise, the beautiful in appearance (100c10–d2, 78d3–e2, *Symposium* 210a4–b6). And he merely swapped or substituted, when he came to its third and final part, the latter for the former (100e5ff.). He was justified in doing so, of course, on the grounds that to each class of things there purportedly corresponds, in the same way, one or another of the separate forms. The hypothesis applies equally to “all things” (100b6–7, 100c6, 78d1–e4, 65d4–e5): “the big itself” is to big things just as “the beautiful itself” is to beautiful things. But this reasoning cuts both ways: we are as justified in resisting Socrates’ substitution as he was in making it. And since Socrates’ insistence that the rejection of the separate forms inspires fear remains incomprehensible so long as we go along with this substitution, we are compelled to see what happens when we resist it. In the event, consequences comparable to the ones

Socrates drew from the—legitimate, it turns out—rejection of the separate forms in the case of big (small) things have to be drawn in the case of beautiful (ugly) things (see also 75c10–d4). In a way, beautiful things prove to be relational in character, too. Still, the insistence that this is terrible or fear-inspiring is not much more comprehensible than the insistence that the relational character of bigness is (but see also what Socrates says of “you [erotic] people” at *Republic* 474c8–475a4).

Where does that leave us? Taking a second step below the surface, let us recall that there is another, more important kind of beauty than the one Socrates seems to have in mind here. For ugly or lacking in a beautiful appearance as he is, Socrates is nevertheless beautiful in his way, and even outstandingly so (99a2–3, 113d3, 116c5–6, 58e4–5, *Symposium* 218d6–219a4).⁶⁹ By what lights? It was said of Theaetetus, a young man whose appearance was almost as hard on the eyes as Socrates’ was, that he was a “beautiful (noble) and good” man, the sort of man who, if he found himself in a battle, one would expect to hear praised for his conduct in it (compare *Theaetetus* 143e6–144a1 with 142b7–c1; *Republic* 402d1–4, *Symposium* 210b6–c6). In contrast to the beauty of a human being or a horse (78d3–e2) or a precious stone (110a1ff.), which primarily discloses itself to the senses through an attractive appearance (79a1–4), that is, “in deeds” or “in works,” beautiful conduct is disclosed primarily, as we have seen, “in speech” (Xenophon *Oeconomicus* 6.13–17, 10.1, *Memorabilia* III.11.1).⁷⁰ More direct evidence of this already well-established distinction is supplied by the fact that, for us as readers, the beauty of Phaedo remains undisclosed and therefore powerless to move us, whereas primarily through our “hearing” what is said of it Socrates’ deed or his acceptance of death still affords us a beautiful and deeply moving spectacle. What is primarily disclosed in this way is of course moral, and not merely apparent, beauty—the nobility (beauty) associated with justice. So if, while staying within the broad sphere of *to kalon*, we simply turn away from the beauty of appearances, beauty that is “good only to be looked at,”⁷¹ the beauty Socrates seems to have in mind here (100c10–d2), to the nobility (beauty) associated with justice, and apply Socrates’ remarks to

it, the gravity of the situation suddenly becomes all too easy to appreciate. Is this, then, the form that Socrates actually has in mind when he insists that the situation created by the rejection of the separate forms is a grave one?

The two consequences that were neither fear-inspiring nor monstrous in the case of big things or even beautiful appearances become so as soon as they are applied—as far as I can tell, especially when they are applied—to the nobility associated with justice. For justice or the nobility associated with it is all but universally said to be something unchangeable, “absolute” (105d16–e1, 70e2–3; *Minos* 315e7–316b2, *Protagoras* 330c2–7, *Hippias Major* 287c1–5; contrast *Republic* 478e7–479b2). And yet, if we apply those consequences to nobility (justice), this conviction would be undone. That which, from one point of view, enables the being or deed to which it is present to be noble (just) would prove to be the very thing whose presence enables it to be, from another point of view, base (unjust) (101a7–8). And, as “monstrous” as it may be, that which enables the being or deed to which it is present to be noble (just) would itself prove to be, from a certain point of view, base (unjust) (101a8–b2).⁷² If these fear-inspiring and highly paradoxical consequences are not expressions of the view that morality is relational in exactly the same way that bigness is, or of what we today would call “moral relativism,” and I do not think that they are, they would seem to have their cause or source in the fact that, strictly speaking, the noble (just) and the base (unjust) share a root or, by the same token, that the noble (just) has multiple roots. Whatever exactly it may mean, this inference is not without warrant in Socrates’ speech or even perhaps in human speech more generally. The consequences starting from which we drew an inference as to their source can also be inferred starting from that source. And in a necessarily restrained attempt to elucidate the two or the link between them Socrates gives some indication in this context not only, as we just saw, of the character of the consequences (from which their source may be inferred) but also of the character of the source (from which its consequences may be inferred). Having already leapt from the indicated consequences to the

source, but only in such a way as to leave the exact meaning of the latter uncertain, we must now, to throw light on this, make our way back to the consequences from what Socrates indicates regarding the source. By doing so, more light will be thrown on the consequences too.

Socrates suggests that the beauty (nobility) of appearances is essentially of concern for its own sake, apart from any good or ill we think it may do us. He does so by speaking at the beginning of his display—and elsewhere, too (65d4–8, 75c10–d1, 76d8–9)—of another one of the separate forms besides “some beautiful itself by itself” (and “some big”), namely, “some good” (100b5–6). And that means that such beauty as Socrates seems to have in mind here, the intrinsically attractive kind, has to be sharply distinguished from those things that, having the form of the good, are essentially of concern for our own sake.⁷³ The same cannot be said of the nobility (beauty) associated with justice, however. That nobility is assigned, according to Socrates’ earlier account of it, to the class of things whose goodness is, as such, of concern for our own sake. And yet the noble (just) cannot be strictly identified with or reduced to the good.⁷⁴ For it is assigned, by that same account, also to the class of things whose beauty is intrinsically worthy of concern (71a6–7, *Republic* 357b4–9). In other words, it is of the essence of that nobility that is associated with justice also to be good and, vice versa, of that very goodness also to be noble.⁷⁵ Insofar as justice or the nobility associated with justice is this whole, the two forms Socrates speaks of here are its elements or parts. In a sense, then, he speaks of the whole. But he speaks of it in this way not, not simply, to indicate his own inability to recognize that whole as a whole (cf. *Apology* 21d4–6); he does so also to indicate the exact source of the paradoxical consequences or, indeed, the controversies to which it, as the strange sort of whole that it is, is bound to give rise.

So even apart from the sense it and perhaps it alone makes of Socrates’ otherwise incomprehensible insistence on the fear-inspiring aspect of the indicated consequences, our turn to the form of justice or the nobility associated with it, as the form Socrates actually has in mind here, is supported also by his reference to its parts—a reference that serves to

indicate the source of the indicated consequences.⁷⁶ In any event, we should not be surprised to learn that justice or nobility, more so than bigness (*Republic* 523a1–524d6, *Statesman* 285d9–286a7), is what lies in the balance just now. For *what* Socrates is at present compelled and able to examine are things noble and just. It was, to be sure, speeches or opinions about these things that the natural scientists, including the young Socrates, lacked the negative as well as positive theoretical resources to hear out. But, since then, the young Socrates has grown up. The removal of the theoretical obstacle that stood in the way of a “humane,” nonreductive approach to man finally allowed a certain practical pressure to make itself felt, compelling Socrates to ask about justice for the first time. And that pressure was accompanied, in turn, by a positive theoretical development in his thought that enabled him, also for the first time, to take opinions or speeches about justice at face value.⁷⁷ That is, “since perfect gentlemanship is not something visible or perceptible to the senses, its discovery became possible only when Socrates turned away from the evidence of sight to ‘take his bearings . . . by hearing, by reputation’ or by what is ‘universally’ said.”⁷⁸ Now, as for *how* Socrates examined these (and other) things, his method was dialectic. And what happens when we put two and two, the method and the matter, together? We have perhaps already come to see, if only in passing, that when it is applied to some of its objects dialectic may lead up and away from them (*Republic* 533b1–d3) to certain fear-inspiring but sufficient results. As we suggested earlier, then, Socrates’ dialectical method exposed those who encountered it to fear, fear that was liable to turn into anger.⁷⁹ A specific rhetorical effort was therefore needed to allay it. And it was for precisely this reason, as we also suggested, that recourse was had by (Plato’s) Socrates to the hypothesis of the separate forms.⁸⁰

Now that what the fear is more immediately a fear of has come to sight, it is not hard to see how the hypothesis of the separate forms was precisely formulated to allay it. Among the things of our experience, nothing is pure and unmixed or unchangeable. The many equal or big or beautiful or just things, for example, are always also, from another point

of view, unequal or small or ugly or unjust (74a9–c5, 78c10–e2). While conceding this, and even drawing attention to it (74d4ff.),⁸¹ the hypothesis of the separate forms brings it about that there are nevertheless at least some things or beings, lying separate and apart from the rest, that always and everywhere remain the way, or what, they are (see 74a9–c5 and 75c10–d1, 78c10–e2). If the susceptibility of just or noble things to a change akin in its effects to (but not, at its source, exactly the same as) the one to which big things, for example, are undeniably susceptible is terrible or fear-inspiring, the hypothesis would serve to allay that fear. It would set one just or noble thing apart, as the form itself by itself, and exempt it from any and all intermixture with its opposite (74a9–c5 and 75c10–d1; *Republic* 478e7–479c5; *Parmenides* 128e6–130a2, 130b7–10, 131a2, 135c9–d1). The impurity or deficiency of the just things or deeds of our experience, such as, for one, Socrates' sitting, which is brought to light by dialectic, would be mitigated as a result. It could be chalked up, in the end, to the failure of the deeds to measure up to the perfection we believe we find in speech. Aside from being perfect, however, the separate forms are supposed to be causes too. And this feature, as incompatible as it may be in the final analysis with the other, brings with it a rhetorical effect of its own. Not only does the perfection of the form of justice seem to exempt it from the impact of dialectical analysis—the form also seems to cause or to account for the justice of the many just things of our experience that, so to speak, “participate” in it. In other words, by removing the deficiencies brought to light by dialectic from the form or the (particularized, separated) class-character and foisting them on the deeds, the hypothesis of the separate forms reinforces the all but universal opinion that justice is something “absolute” (105d16–e1, 70e2–3; *Minos* 315e7–316b2, *Protagoras* 330c2–7, *Hippias Major* 287c1–5; contrast *Republic* 478e7–479b2). It does this even as it reinforces, at the same time, the all but universal opinion that moral aspirations or ends are and can be realized in or by the deeds of men.⁸² And this blend—or, better, this blur of effects—helps fill out the suggestion with which we began: that the hypothesis of the separate forms serves a rhetorical purpose. It is

worth noting that our suggestion is borne out by what Socrates himself says at the end of book 5 of the *Republic*, right before or as he introduces the separate forms. There, he indicates that non-philosophers, whose reaction to the application of dialectic to customary or lawful beliefs about the noble (beautiful) (479d2–4) is likely to be an extremely angry one, must be mollified and gently persuaded by some speech, a speech that will “conceal” from them that, as that application itself goes to show, they or their beliefs about the greatest things (*Apology* 22d7) are not healthy or sound (*Republic* 476e1–2).⁸³

With that said, our suggestion has been nearly, but not yet fully, filled out. For we began by suggesting that the fear allayed by the separate forms was the fear of death. In the meantime, however, that fear has almost inexplicably been replaced by the fear of the truth about justice or the nobility (beauty) associated with it. An understanding of the *Phaedo* as a whole, but especially of Socrates’ apology to his young friends (63e8–70b5) and its later “repetition” (80d5–84b4), would be among the least of the qualifications needed to see the reason for this. For now, all that can be said is that the change would be intelligible in light of the conclusion, which one will be inclined to draw in response to the problem of justice, that what presents itself immediately as a fear of the truth in question is at bottom or ultimately a fear of death. The fear of death may be allayed, to put this conclusion somewhat differently, by a hope for immortality to which our unexamined opinions concerning things just and noble somehow give rise.⁸⁴ And an increase in one’s awareness of the threat to the validity of those opinions, an increase in one’s knowledge, would accordingly be accompanied by a painful increase in one’s awareness of death. Together with what we have already seen, then, this conclusion would make clear at last how exactly the doctrine of the separate forms gives the semblance of scientific support to the hope of others for immortality and thus keeps Socrates himself safe from the anger of those whose hope his dialectical method would damage.⁸⁵

This conclusion would make something else somewhat clearer, too. For Socrates confessed to being unable to rely confidently on the

identification of the just thing with what is “better” or in any case on the acknowledged presupposition or implication of this identification: something divine (63b9–c4, as well as 108d1–9, 114d1–2, and 107c5–8). Given Socrates’ awareness of his own human limitations (61b3–7), such reliance would seem to have required a prior reliance on one or many intermediaries (61d9, 70c5–6, 110b5–6; *Timaeus* 40d6–41e3) whose trustworthiness Socrates’ felt free to question (70d2–5) evidently because, for some reason, he denied that those intermediaries had truly “seen” what they said or believed they had (109d4–5; *Euthyphro* 6a7–c4). But what is the reason for this denial? Though this escapes the notice of non-philosophers, Socrates asserts, philosophers practice nothing other than to die and be dead (64a4–6). Accordingly, the fable he delivers at the beginning of the dialogue is intelligible only if the pleasure he really has in mind is that of knowing (nature) and the pain, which his wife has just called to mind (60a1–6), that of knowing of death (60a9–c7). Does Socrates’ assertion follow from the fact that nature, the very thing that the philosopher as such needs (to know), is also what condemns him to death (Xenophon *Apology* 27)? Or is the opposite no less true, as the fable itself suggests? That is, if the hope for immortality arising from our unexamined moral-political opinions carries with it a rather incredible vision of the whole—a hope is not merely a wish, after all (cf. Aristotle *Nicomachean Ethics* 1111b19–23)—then perhaps the deepest, but not the only, reason for Socrates’ intellectual autobiography’s place in the *Phaedo* is this: adequate knowledge of the whole (philosophy) presupposes adequate knowledge of death (political philosophy). In any event, the search for the cause of generation and corruption somehow continues, indirectly (cf. 97b6–7), with Socrates’ second sailing. But to see with sufficient clarity how it does we would need a study of Plato’s *Apology*, the dialogue that deals with the fourth and final stage of Socrates’ intellectual development.

Conclusion

Today, “given the contemporary separation of science from philosophy or the insolubility of questions of ethics and metaphysics by the scientific method, [the] tentative restoration of ‘classical political science’ and even that very expression are apt to appear unintelligible.”¹ But the foregoing study has tried to show that the separation of (political) science from (political) philosophy is an error. Even when it was at its most wide ranging, the study tried to set on a broadly scientific basis and in this way to recover—so as to question, yes, but in due course and on its own terms—the (social) world as everyone is already, prescientifically aware of it.

As things now stand, the field of political science—not to say, Western civilization—is conditioned by modern natural science, which means it is conditioned by claims whose validity it can scarcely, if at all, assess. Disagreements about justice, whose immediate fruit would in other contexts be the incentive to resolve them, that is, to engage in political philosophy, come to sight in the context of modern natural science as unresolvable. To attempt a dialectical, “cross-examining analysis”—or an intelligible, noncontradictory description—of the social world as we are already, prescientifically aware of it is all but inconceivable today.² And so, rather than try to discover the truth about justice and the like, the field is constantly tempted by two extremes, which may be put somewhat brusquely as follows. Either, under the influence of modern natural science, the field is tempted to construct an apparently precise technical language that has little or no basis in the ordinary language of politics or,

in reaction to modern natural science, it is tempted to take the already somehow obscure language of politics and render it still more obscure.³ Both extremes lead to the same result, however. The technical language of the one extreme, far from “allowing more precise descriptions of concepts and relationships than ordinary language” or “unlocking the code of important social phenomena” (Lupia 2013, 2), actually has the relatively pleasant effect of precluding a truly open-minded reckoning with social phenomena. And the inability or unwillingness of those on the other extreme to ascend from “ordinary language” to “precise descriptions”—“as if the use of explicit methods would diminish their creativity” (King, Keohane, and Verba 1994, 8)!—is equally effective in this regard. Whichever way we turn, we need not question our opinions; we can keep dreaming.⁴

The centuries-old separation of science from philosophy, which lies at the root of these and other characteristically modern attempts to replace common sense with conscious constructions or creations, involved from its outset a dogmatic skepticism whose objective was in part to render laughable the claims of believers to have genuine knowledge of the divine. “Common sense contains indeed genuine knowledge of broomsticks, but the trouble is that this knowledge has in common sense the same status as the alleged knowledge concerning witches.”⁵ And so it seemed to the great Enlightenment thinkers of the seventeenth century that it and the world given by it had to be subjected to radical, universal doubt. Science, they hoped, would rest securely on whatever survived the purge. But if this in effect precluded rather than constituted a truly open-minded reckoning with the moral-theological dimension of things, perhaps it is for this reason to begin with—because we still need to know how we should live—that we feel compelled to return to the classics.

That said, to return to the classics is not necessarily to relinquish the mantle of science. On the contrary, notwithstanding the fact that Socrates sought to recover the prescientific awareness of things, he still denied that anyone is in possession of a knowledge superior to his own, merely human knowledge (compare *Apology* 20d6–9 with 23a7–b7; *Phaedo*

79b8–10, contrast *Laws* 716c4–6). As regards Socrates' reason for this denial, it is a question whose surface we have barely scratched. But it would seem to have been dependent on the very concession to common sense, and therewith to "Hesiodic" claims, that subsequent thinkers did not know they needed to make. And if Socrates' reason was a sufficient one, unlikely though that may seem, then the scientific method would be nothing other than the Socratic method.⁶

Notes



INTRODUCTION

1. Laslett 1956, vii; Plamenatz 1960, 37; Cobban 1953; Kress 1979, 526; Smith 1957, 734; Wolin 1960, v.

2. Gunnell argues that the fall of behavioralism disguised “the extent to which the basic assumptions about science had remained unchanged and, to a large extent, unscathed” (1986, 44).

3. Oren 2006, 73–78; Ball 2007, 4, 6; Bond 2007; Coates 1996, 4; Luke 2005, 479; Mead 2010, 453; Behnegar 2003, 9–27.

4. Kaufman-Osborn 2010, 656; Rehfield 2010, 467; Kasza 2010, 698; Vincent 2004, 92.

5. See C. Taylor 1985, 20–21. Compare also A. Sandel 2014.

6. “The controversy [Wolin] identified over the value and meaning of methodological rigor continues, more than 40 years later, to drive major debates in the field,” says Meckstroth (2012, 644). And, in Michael Parenti’s experience, “The behavioralists have evolved into ‘rational choice’ specialists whose highly abstracted model-building seems to be something of an end in itself, valued for the elegance of its mathematical configuration. When critical questions about the political science discipline are posed, they seem to be the same ones that were put about in my salad days a half-century ago: What are the promises and limits of the scientific method as applied to political science? Does the more methodologically rigorous work have a commensurate payoff? Or does it come at too high a cost to understanding political reality?” (2006, 503–4).

7. Surely the loudest response in recent memory on the part of political theorists and others to “the hegemony of quantitative methods in American political science research, curricula, journals, and positions” (Schwartz-Shea and Yanow 2010, 741) was the Perestroika movement. But even those who were not altogether unsympa-

thetic to its call for methodological pluralism were bound to feel that that movement was plagued by a certain “lack of clarity” (Isaac 2010, 736). At least one Perestroikan insisted that “Perestroika’s call is not for an ‘anything goes’ pluralism, but rather for the recognition that there is more than one way of doing science *while still remaining ‘scientific’*” (Yanow 2005, 201). And yet, apart from various critiques of the view of science implied by quantitative approaches to the study of politics (e.g., Sanders 2005), the movement did not formulate a clear-cut, systematic account of what it would mean for a political theory to be “scientific” in this broader sense (Topper 2005, 181ff.). And so in the eyes of its critics Perestroika seemed to have given expression to “a desire for pluralism rather than a defense of best practices”; it could be written off, and indeed it frequently was, precisely as a call for “‘anything goes’ pluralism” (Laitin 2003, 163, 179–81; Bennett 2002, 178). For “methodological pluralism, no less than political pluralism, can never be coherently defended *as such*” (Topper 2005, 186).

8. “The distinction between political philosophy and empirical political science . . . has by now the status of a traditional institution within the academic discipline of political science” (Salkever 1990, 13–14).

9. According to Alfred Cobban and others, “the decline of political theory” was due to “two modes of thought which have had a fatal effect on its ethical content” and which “have come to dominate the modern mind”: “these,” he said, “are history and science” (1953, 333; Gunnell 1993, 246). Only the effects of the second mode of thought can be adequately discussed here.

10. Berlin 1962, 3, 7–8; MacIntyre 1984a, 6; Plato *Alcibiades* 111b11–112b9, *Phaedrus* 263a2–b1, *Euthyphro* 7b6–d8, *Hippias Major* 294c8–d3; Aristotle *Nicomachean Ethics* 1094b15–16.

11. Behnegar 2003, 23–24; Gerring and Yesnowitz 2006, 104; compare Kaufman-Osborn 2010, 661, with Kasza 2010, 699.

12. Cf. King, Keohane, and Verba 1994, 6. Evidence of the persistent “hegemony of the positivist ideal of science” in the social sciences is provided by Schwartz-Shea and Yanow, whose survey of fourteen social science research methods texts found that each and every one of them “explicitly endorsed or implicitly assumed ‘positivistic definitions of science’” (2002, 457, 481).

13. MacIntyre 1984a, 52–53, 79–84; Nagel 2012, 97–126; Pippin 2009, 37; Ricci 1984, 145.

14. Although their view of politics presupposes these “historical developments,” “empirical” political scientists generally decline to be dragged into rarified debates about their validity. On the whole, “conflicts over epistemology, ethics, or the nature of the field were and are [political] theory’s provenance” (Barber 2006, 539; but cf. Leopold and Stears 2008, 1). For instance, the authors of one of the most important

attempts to articulate the view in question all but began their work with the disclaimer that “our focus here on empirical research means that we sidestep many issues in the philosophy of social science as well as controversies about the role of postmodernism, the nature and existence of truth, relativism, and related subjects” (King, Keohane, and Verba 1994, 6). They did not understand themselves to be thereby depriving their articulation of any and all scientific value. This goes without saying. Rather, as Schwartz-Shea and Yanow have noted, they thought that “such issues are unimportant for empirical research” (2002, 475). Apparently “empirical research” is itself to be validated, not directly, by rarefied debate about its presuppositions, “the nature and existence of truth . . . and related subjects,” but by its results or effects. Or, in the words of Anthony Downs, “theoretical models should be tested primarily by the accuracy of their predictions rather than by the reality of their assumptions” (1957, 21). But, besides the fact that political science is incapable of making significant and reliable predictions (cf. Keohane 2009, 362), the “don’t think, just do” approach to political science—John Gerring calls it a “seat-of-the-pants” approach (2001, xvii)—still tends to insist that to predict is also something else, namely, to know, and this insistence compels a return to the question of what knowledge or science is.

15. This is largely in keeping with Keith Topper’s account of the crisis. “With both the advocates and opponents of a unified science agreeing that the astonishing successes of the physical sciences issued from their possession of theory- and context-independent criteria for choosing between alternative hypotheses and theories,” he says, “the central issue was whether such criteria could be productively applied to the human sciences” (2005, 20).

16. Indeed, “vague rhetoric about the importance of citizens capable of critical thinking or having cultural literacy will not do” (Brown 2010, 682).

17. The formulation is inspired by Bent Flyvbjerg, who gives to each of the three chapters of *Making Social Science Matter* devoted to critiquing “the modern concepts of rationality and social science” (2001, 55) the following three epigraphs, respectively: “Our task is to broaden our reasoning to make it capable of grasping what, in ourselves and others precedes and exceeds reason” (Maurice Merleau-Ponty); “If I was told anything that was a *theory*, I would say, No, no! That does not interest me” (Ludwig Wittgenstein); “Practice has a logic which is not that of logic” (Pierre Bourdieu). These telling remarks come close to Hamlet’s “there are more things in heaven and earth, Horatio, than are dreamt of in your philosophy” (I.5.167–68). But as the contradiction in Merleau-Ponty’s remark and the ambiguity in Bourdieu’s suggest, there remains the crucial difference that whereas Hamlet’s words lead away from reason toward piety, Flyvbjerg is not willing to relinquish the mantle of science completely.

18. “Political theorists,” according to Leopold and Stears, “are often silent on ques-

tions of method and approach" (2008, 1). The very volume that opens with this observation, *Political Theory: Methods and Approaches*, inadvertently suggests the reason for this. For shortly after lamenting the fact that, unlike scholars in other branches of political science, "political theorists generally spend little time addressing questions of 'how' and 'why' in their work" (1), the editors announce that their volume will not even attempt to propose a method sufficient to "protect students against error and shepherd them towards *the 'truth'*" (3, emphasis added). Accordingly, although they say that their volume leads (only?) to the conclusion that there is "very little" agreement on questions of method in political theory, the volume seems to presuppose that there is considerable agreement among political theorists at least as to this: that there is no "right way" to conduct research in political theory (9–10; cf. Topper 2005, 186). And how could this presupposition not encourage silence on questions of method? On one hand, if we do not know the right way to assess our work, is it not better to remain silent on the question and be thought fools than to speak and remove all doubt? On the other hand, if we already somehow "know" there is no right way to assess our work, what incentive do we have to raise the question of its assessment?

19. Flyvbjerg's modification of the tried and true political theorist's refrain—"a manifesto" for the Perestroika movement in political science (Schram 2012, 16)—is a case study in this regard. Flyvbjerg believes that modern natural science retains "an undeniable basis," or that its "results speak for themselves," even though its "foundation is epistemologically more complex than previously thought" (2001, 26–30). In addition to being predictive, he says, it is explanatory (3, 4, 26, 39, 40, 46, 61). Yet whereas Flyvbjerg is for this reason willing to call natural science "epistemic," i.e., "well-founded," or "what must be regarded as correct," he refuses to say as much of social or political science (25, 172n.3). To be sure, he does not actually go so far as to prove that political science cannot, and hence will not, ever be "well-founded" (46–47). But for some reason he remains confident that it is not and will "probably" never be. His confidence on this score does not lead him to reject political science tout court—specifically, on the grounds that having a department of political science in a university is akin to having faith healers in a medical school. Nor does it lead him to redouble his faith, hope, and love for progress (30–32). It leads him rather to lower the aspirations or requirements of "political science" to a point where they are more likely to be met (cf. 3, 61). And to this end Flyvbjerg all but trades the discipline's steep scientific aspirations or requirements—particularly the aspiration to, or the requirement for, "well-founded" accounts that "must be regarded as correct"—down for extra-scientific ones, e.g., "what matters" or "practical application" (cf. 30, 139, 173). Yet, contrary to those of his critics who believe he abandons "the project of a scientific discipline" completely (Laitin 2006, 33), he only "all but" does so. For although he says

that his “phronetic” social science is *not* a kind of science (57) and, what is more, that nothing is true or that everything is relative when it comes to the “core” “value-rational” questions about “what is good and bad for humans” (60–61, 99, 131, 139, 101), he also says the reverse. In particular, he says that his “phronetic” social science is “the most effective bulwark against relativism” (130, 62) and that it can demonstrate that some accounts are “better,” or more valid, than others (130–31). And so it comes as no surprise that his anticipatory response to the criticism that his “phronetic” approach amounts to a dismissal of “scientific knowledge” is *not* to accept the criticism, but to blur the issue beyond all recognition (49). Aristotle, to whom Flyvbjerg selectively looks for guidance, was for his part clear: as Socrates and Plato maintained, too, *phronēsis* is inferior to science (178n.28, 59).

20. The obscurity of much political theory—in addition to being problematic in itself—accounts in part for the peculiar repetitiveness of the debate over the cognitive value of political theory. For the half measures that political theory’s defenders all too often embrace ensure that the fundamental issue is blurred rather than faced. The defenders of political theory neither completely bid farewell to science as they conceive of it (and thus accept *another*, new aspiration or requirement for “political science,” e.g., “what matters” or “practical application”) nor stake an unqualified claim to it themselves (and thus advance the debate to the point where it has to do with whose approach, “quantitative” or “qualitative,” truly lives up to an aspiration or requirement acceptable in principle by all). Their vacillation on this score—as to whether they are proposing a new aspiration or requirement for “political science” or contending for the old one—has the practical consequence that the goal line of the debate is constantly moving. And the constant movement of the goal line, among other things, ensures that the contest never ends.

21. Cicero *Tusculan Disputations* 5.10, *Brutus* 31, *Academica* 1.15–16, *On the Orator* 1.42.

22. Aristotle *Metaphysics* 987b1–2, cf. 1078b17–18, *Parts of Animals* 642a28–31 in context; Plato *Phaedrus* 229b4–230a7, compare *Apology* 19c5–d1 with 21d2–e1, 23b4–c1; Xenophon *Memorabilia* I.1.11–16, cf. IV.7.

23. Cicero *Tusculan Disputations* 5.10, *Brutus* 31, *Academica* 1.15–16, *On the Orator* 1.42; Aristotle *Metaphysics* 987b1–2 (cf. 1078b17–18), *Parts of Animals* 642a28–31 in context; Xenophon *Memorabilia* I.1.11–16. Cf. D.L. 2.20–21; Guthrie 1969, 417–25.

24. Cicero *Academica* 1.15–16; Aristotle *Metaphysics* 1078b27–30; Xenophon *Memorabilia* I.1.11, I.13–14, I.4, I.6.14, IV.3, IV.6.1, IV.7.5–7, *Symposium* 7.4; Plato *Phaedo* 97b6–7, 99c8ff., compare *Apology* 19c5–d1 with 23a5–b4, cf. Burnet 1927, x.

25. As David Roochnik says, “it is easy to imagine Democritus popping into a neuroscience laboratory and becoming enthralled by the research being done in cognitive neurobiology, the study of cellular foundations of cognitive mechanisms such

as memory and emotion. In this sense, then, Socrates' arguments . . . represent a critique of both the Presocratics *as well as contemporary materialists*" (2004, 96, emphasis added).

26. For a full treatment, and a work of the highest order, see Bruell 2014.

CHAPTER 1. THE PROBLEM OF THE YOUNG SOCRATES

1. A. Taylor 1917, 87.

2. Unless otherwise noted, all references to Socrates are to the Platonic Socrates. As regards "the Socratic problem," it will have to suffice to say that if Xenophon, Plato, and Aristotle present one and the same Socrates, and if moreover the Socrates of Aristophanes does not differ radically from theirs, it ceases to be of much or any concern. On Xenophon's Socrates, see Bruell 1984. On Aristotle's Socrates, see Chapter 7, note 76 below.

3. According to Rowe, "The division of the Platonic dialogues into 'early,' 'middle,' and 'late,' now commonly accepted in English-speaking countries and beyond, mainly rests on" a particular reading of Plato (2007, 41–42). As that reading would have it, in some dialogues Socrates speaks of and believes in the separate forms, in other dialogues he does not—in fact, in these other dialogues, so far from proposing a positive teaching of his own, Socrates seems to limit himself to refuting the opinions of others (cf. Rickless 2007, 1–2). From the discrepancy between the Socrates who speaks of and seems to believe in the "grand new metaphysical theory" of the separate forms, on one hand, and the Socrates who emphatically does not, on the other, it could seem to follow that whereas the former is encumbered by "Platonic" additions, the latter remains fundamentally "Socratic" (Rowe 2007, 41–42). So the developmentalist reading of Plato itself rests on a particular non-developmental reading of Plato. Is it a satisfactory reading though? "There appears to be a departure. Therefore," it is supposed, "there is a departure. Therefore we should ask: how can we explain the departure?" (Peterson 2011, 7). But is there really a departure? Or does there merely appear to be at first glance? For example, if after a close reading of the relevant texts, we have no choice but to draw the conclusion that the alleged discrepancy between the "Socratic" and the "Platonic" Socrates reflects a discrepancy between the genuine and the rhetorical procedure of one and the same Socrates, then there merely appears to be a departure. For further discussion of the flaws of the "developmentalist" approach to Plato, see Annas 1999; Cooper 1997; Griswold 1999; Howland 1991; Nails 1995; T. Pangle 1987; Peterson 2011; Rowe 2007; Zuckert 2009.

4. Concerning natural science, says Burnet, "The attitude of Socrates being such as is described here [in the *Apology*] and, at greater length, in the *Phaedo*, we may be

sure that he never talked about these matters in public. Plato is consistent on this point. In the *Timaeus*, for instance, Socrates is a silent listener to the discourse of the Locrian Pythagorean. It is practically only in such things as the myth of the *Phaedo* that he is made to betray his knowledge of contemporary science” (1927, 163). According to Peterson, *Apology* 19a–d says that “no one has ever heard Socrates conversing” about natural science (2011, 196n.2), but this goes much too far.

5. In fact, in Burnet’s view, 19c7 means that Socrates’ admiration goes so far that “he is not to be frightened into expressing a contempt for science which he does not feel” (1927, 163).

6. It is not true to say that Socrates remains “explicitly agnostic about what it is, if anything, that natural philosophers . . . know” (Nehemas 1999, 68).

7. As a young man, Socrates read Parmenides and Zeno (*Parmenides* 128a4–b6) as well as Anaxagoras (*Phaedo* 98b3–6, cf. *Apology* 26d6–e3). Xenophon, like Plato, lets it be known that Socrates was famous or infamous as a natural scientist long before he ever inquired into what “a noble and good man” is (*Oeconomicus* 6.12–13, 11.3, cf. *Symposium* 6.6–8; *Memorabilia* I.11–16). Did his Socrates read the natural scientists even in his maturity (*Memorabilia* I.6.14)?

8. Cicero *Tusculan Disputations* 5.10, *Brutus* 31, *Academica* 1.15–16, *On the Orator* 1.42; Aristotle *Metaphysics* 987b1–2, *Parts of Animals* 642a28–31 in context; Xenophon *Memorabilia* I.1.11–16. In addition to the usual sources for the traditional view—remarks of Cicero, Aristotle, and Xenophon—Paul Vander Waerdt has assembled an extensive catalogue of subsequent sources in Hellenistic philosophic polemic and ancient doxography (1994, 48–49). For the reception of this view by the humanists during the Italian Renaissance, see Hankins (2006; 2008).

9. DK 59.A18 = Graham 2010, 279. If, as A. Taylor says, “atheism is treated by Plato as identical with the doctrine that the world and its contents, souls included, are the product of unintelligent motions of corporeal elements” (1956, 490), and if Socrates “gave up the mechanical philosophy in early manhood” (199), then, at least prior to giving up that philosophy, when, “as a young man, Socrates had felt enthusiasm for ‘natural science’” (200) and “was deeply interested in all these matters” (161n.2), the Platonic Socrates was, on the basis of Taylor’s own premises, an atheist (cf. 177). Consequently, “if Plato was to some extent an apologist for Socrates, then it was in his apologetic interest to downplay any interest Socrates may have had in natural philosophy and to emphasize the man’s interest in practical ethical matters instead” (Nails 1995, 9n.1, 14).

10. Only “about” three, for the *Theaetetus* is also narrated by someone other than Socrates. But Socrates (perhaps unwittingly) contributed to the writing of it, and it therefore belongs in a class of its own. In a way, the *Theaetetus* is narrated by Socrates.

11. As Burnet seems to think (1911, xxiii). A. Taylor attempts to account for this “cumbersome” device by supposing that it is “due to the desire for dramatic life and colour. It permits of the sort of record of the byplay between the personages of the story which contributes so much to the charm of the *Phaedo*. But the labour required to keep up the ‘formula’ is so great that it is not surprising that Plato finally dropped it,” in dialogues purported to be later (1956, 19–20).

12. The *Phaedo*, which contains Socrates’ intellectual autobiography, is named after the man who reports what occurred on the day of Socrates’ death. The *Symposium*, reported by Apollodorus, recounts how Socrates once learned about love from a (real or fictional) teacher he calls Diotima (201d1–212c3). And the *Parmenides*, which is reported by Antiphon, presents the young Socrates learning from the philosopher Parmenides about what has to do with our (discursive) grasp of the beings. There are, however, complications and divisions even within this class of dialogues. For *Phaedo* himself witnessed first hand the speeches and deeds he reports (57a1–4), whereas Apollodorus and Antiphon did not. They, for their part, merely repeat what they heard from others (respectively, Aristodemus and Pythodorus) who, like *Phaedo*, witnessed them first hand. Whatever else Plato may have meant by this complication, it implies that the *Parmenides* and the *Symposium* are even less reliable than the *Phaedo*. Furthermore, while Antiphon, in his youth, checked his source, Pythodorus, and studied the conversation that was reported to him closely, he is already an old man who has turned (in contrast to Pheidippides, on whom Aristophanes’ Socrates had the opposite effect) from philosophy to horsemanship (*Parmenides* 126b8–127a8). Apollodorus, on the other hand, checked the report he received from Aristodemus with Socrates himself (*Symposium* 173b4–6). In other words, the *Phaedo* is by design more reliable than the *Symposium*, which is more reliable, in turn, than the *Parmenides*, the most remote of the Platonic dialogues (see Chapter 7, note 33 below).

13. Lampert 2010, 5.

14. Plato goes out of his way to make it perfectly clear at the beginning of the *Phaedo* that, had his intention not required the reverse, the *Apology* in particular could have been a narrated dialogue—a dialogue narrated to Echecrates—and the *Phaedo* a performed one (58a1–5).

15. The view that, in the *Apology*, Socrates says “that comic poets have stoked *false* rumors about him” as a natural scientist (Schlosser 2014, 106, emphasis added) is in need of qualification, as we have already seen. And this is significant. For, although there is “impressive evidence for a period in the life of Socrates when he was intensely interested in natural science” (Guthrie 1969, 422), “some have seen it all overthrown—Aristophanes, Xenophon, and Plato himself in the *Phaedo*—by some pleas of Socrates in the *Apology*” (423). Yet, notwithstanding the impressions of the text that have

passed for accurate readings over the years, Plato's *Apology* does not actually contradict (if anything, it supports) the "impressive evidence for a period in the life of Socrates when he was intensely interested in natural science."

16. That "Plato's Socrates seems to acknowledge what he was at pains to deny in his *Apology*—namely, that there was a basis for Aristophanes' depiction of a philosopher named Socrates as a student of nature in his *Clouds*," is undeniable (Zuckert 2004, 192n.11; Kierkegaard 1989, 146). As a rule, however, the discrepancy between the *Apology* and the *Phaedo* is ignored by scholars or, when it is not simply ignored, it is dismissed by them out of hand. According to Hackforth (1972, 128), for example, that the young Socrates was a natural scientist is "compatible with his denial in the *Apology* [19C, 33A] that he never *taught* anybody natural science." But in the *Apology* Socrates apparently denies having taken part in, not merely having taught, natural science (*Apology* 19a8–d6). Bluck, in contrast, denies that Socrates "*ever* went in for anything in the nature of physical research or advanced study," because "the *Apology* precludes that idea" (1955, 113n.). That is, he accepts without argument the version of Socrates' past seemingly at least given in the *Apology*, an acceptance that would, needless to say, require him to deny somehow the information supplied by the *Phaedo*. (Unsurprisingly, when he turns to the plain meaning of the *Phaedo*, he cannot maintain this denial consistently [105, 105n.1, 111, 113n.2].) Bostock recognizes the discrepancy, it seems, and yet chooses not to stop and reflect on it: "to judge from the *Apology*," he says, "Socrates was never interested in [natural science], and the evidence of Aristophanes' *Clouds* should be set aside" (1986, 136n.2). A. Taylor (1956, 161n.2), whose account, as we have already seen, has internal difficulties of its own, follows Burnet. But Burnet, by treating Socrates' repudiation of the rumors that he was (or is) engaged in natural science as a repudiation, instead, of his own capacity for natural science, dodges the question (1927, 162). In other words, Burnet, like Hackforth, but unlike Bluck, accepts the information supplied by the *Phaedo* (see Burnet 1911, xxxviii–xlili, 95) and yet chooses to overlook the plain meaning of the text of the *Apology* in order to remove the discrepancy created by that acceptance. Although the consensus as to the unimportance or nonexistence of the discrepancy in question is maintained by modern scholars almost to a man, it is maintained on numerous, mutually exclusive grounds; for this reason too, then, it cannot be considered authoritative. Vander Waerdt is one of a growing number of exceptions to the *consensus gentium* (1994).

17. According to Vlastos, "the importance of this passage can hardly be exaggerated" (1969, 291). "Plato's *Phaedo* dialogue must be considered one of the most marvelous and significant writings in all Greek philosophy," says Gadamer (1980, 21), and Socrates' intellectual autobiography is, for its part, "indubitably, the high point of the whole dialogue" (32). Mueller adds that it is "our earliest extant extended discussion

of a fundamental question of scientific methodology: what constitutes a satisfactory explanation of natural ‘phenomena’?” (1998, 67). And Paul Elmer More believed, maybe correctly, that “this passage from the *Phaedo* . . . describes . . . the most important and significant and revolutionary event in the whole vast range of philosophy” (1934, 37–38). See also Sharma 2009, 137.

18. See Stern 1993, 25. As Irwin puts it, “Naturalists give arguments (*logoi*), in contrast to the traditional stories (*muthoi*) told about the gods by the poets” (1992, 52).

19. As we learn from the narrator’s preliminary discussion with his listeners, Socrates’ execution was delayed owing to a certain myth or to the Athenians’ widespread belief in a certain myth (58a10–c5). For the Athenians say and believe that, in ancient times, Theseus rescued the “twice seven” young Athenians (seven men, seven women) who had to be sent every nine years to be devoured by the minotaur in Crete. And it is also believed that, prior to their rescue by Theseus, the Athenians made an oath to Apollo to the effect that, granted the safe return of the fourteen youths, the city would send a ship to the god at Delos every year. Because it was the law that, for as long as that ship is abroad, no public executions could be carried out, it was owing to the timing of the ship’s voyage and, moreover, to the widespread belief in the myth that Socrates’ execution was delayed. In keeping with the myth *Phaedo* recounts, the number of Socrates’ (named) friends who were present at his death is also fourteen: nine Athenians, five foreigners (59b5–c6). On closer inspection, even the distribution of the fourteen is in keeping with the myth; for, as Plutarch tells us, Theseus brought along not, in fact, the mandated “twice seven,” but two additional men disguised as women, hence, nine men. Now, it is often supposed that in likening the *Phaedo* to the Theseus-myth, as he surely does, Plato likens Socrates to Theseus, who somehow saved the fourteen from all but certain death (Benardete 2000, 280; Burger 1984, 17–20, 115, 213; Dorter 1982, 4–5, 86, 141; Klein 1985, 375–78). As Plato stresses here (58a10–b1), however, Theseus was himself numbered among the fourteen, whereas Socrates is not one of them (59b5–c6). Socrates would seem to be likened, instead, to one of the mothers who, according to Plutarch, when the “twice seven” youths were about to go to their death in Crete, “for the sake of comforting and encouraging the children, spun out tales [*muthoi*] for them” (Plutarch *Theseus* 23.3). Cf. *Theseus* 23.2–3 as a whole, which is Plutarch’s account of the “festival of the god” (61a5) responsible for delaying Socrates’ execution; it may be that Socrates’ remarks at 69c8–d1 have to be understood in terms of the details of this festival.

20. Socrates himself laughs, albeit only “gently,” twice in the *Phaedo*, and perhaps nowhere else in Plato’s dialogues (Rosen 2005, 98). First, he laughs at the failure of his apology to persuade Simmias (84d9). Second, he laughs at the failure of his combined speeches (or myths) to persuade Crito—probably the oldest of those present—of the soul’s immortality (115c5). His laughter is a clear indication of how seriously he takes

these efforts at persuasion. In keeping with this, Socrates and Crito spent the day before the events recounted in the *Phaedo* in conversation with Simmias, Cebes, and the others. All the while, however, the old men kept concealed from their young friends the truth that Socrates would be put to death the next day (compare 59c8–e2 with *Crito* 43a1–44a4). They did so no doubt for much the same reason that Crito let Socrates sleep that morning—because it is relatively pleasant to be asleep, for some (contrast *Crito* 43b10–11), if to be awake is to be aware of death (*Crito* 43b1–9). And so the *Phaedo* preserves in a different way the setting of the previous day’s conversation: in both cases, the two old men let the young men dream. (As for the dream Socrates reports to Crito on the day before his death [*Crito* 43d8–44b4], besides being proved false, neither Crito [46a5–7] nor Socrates himself [46e3–47a1] places much or any faith in it.) According to Peterson, in the *Phaedo* “Socrates is articulating views that would persuade his listeners rather than expressing his own convictions. Moreover,” she adds, “the weakness both of the *Phaedo*’s conception of philosophy as well as of its arguments for immortality give us reason for the stronger result that the depicted Socrates would reject them” (2011, 14, 233). See also Bolotin 1987.

21. Burnet 1911, 98.

22. In keeping with this, the first recapitulation alone is silent about the terror of death (contrast 91d2–7 with 88b6–8, 91c8–d2, and 95b7–e1). For other discrepancies between Cebes’ original objection and Socrates’ two recapitulations, see Ahrens Dorf 1995, 163.

23. Had Socrates simply produced the sought-after demonstration first, then the larger of the two questions, the question of the possibility of such a demonstration, would of course have been answered, too, and Cebes’ wavering would have been put to an end. This is how one would expect someone who possessed a demonstration of the soul’s immortality to reply to Cebes’ request. It is not, however, how Socrates proceeds. Instead, Socrates addresses the larger question of the possibility of a demonstration of the soul’s immortality first, by means of his intellectual autobiography, before going on to attempt to produce such a demonstration. Backwards as it may seem, this way of proceeding makes sense as *the* reply to Cebes’ request only if, in the final analysis, the answer to the former question is a negative one. For the question of science would, in that case, necessarily take the place of a more straightforward reply to Cebes’ objection.

CHAPTER 2. WHAT IS SCIENCE?

1. DK 11.B1, 11.A11, 11.A23 = Graham 2010, 26, 27, 30, 35.

2. According to Stern, this is the only mention of “wisdom” in the dialogue (1993,

207n.36). It may be that natural science, if it were possible, would alone be truly deserving of the name.

3. Leibowitz argues largely on the basis of this passage that the young Socrates believed that “philosophy or the knowledge it seeks is ‘noble,’” and that “this nobility or ‘splendor’ is what drew him to philosophy in the first place” (2010, 72, cf. 52n.2; see also Lutz 1998, 15). However, Abū Bakr Muhammad ibn Zakariyyā al-Rāzī’s position is more accurate. According to his account of the young Socrates, “[Socrates] was the way he was at the very outset because of his great amazement over philosophy, his love for it, *his desire to devote to it the time otherwise dedicated to passions and pleasures, his nature being inclined to it rather than to that*, and his making light of and looking down on those who did not view philosophy in the way it deserves and who preferred what was baser than it. Without a doubt, at the start of stirring and ardent matters, one prefers turning to them, being excessive in loving them and pursuing them, and hating those opposed to them until, when he penetrates them deeply and the matters become firmly settled in him, the excessiveness about them declines and he returns to moderation” (1993, 228, emphasis added). That said, Al-Rāzī’s account of the Socratic turn is not to be mistaken for Xenophon’s, Plato’s, or Aristotle’s. And Mhire’s claim that Strauss based his understanding of the Socratic turn on al-Rāzī’s account of it is not true (2013, 732, 733, 740). Among other things, in the passage on whose authority Mhire bases this claim Strauss merely refers to al-Rāzī’s account as one possible way—not the only way, and not necessarily the best way—of understanding the Socratic turn (1966, 314). *Socrates and Aristophanes* in general, and the paragraph whose straightforwardness Mhire overestimates in particular, experiments with a number of different ways of understanding the problem of the young Socrates; as Stauffer notes, however, “none of them can be the last word” (2014, 332).

4. As Aristotle says in *Metaphysics* A2, both philosophers and lovers of myth wonder at what is unknown. Therefore, at the highest level, they wonder about the genesis of the whole (982b17). In their wonder, the two could appear to be akin, “somehow” (982b18–19). However, the philosophers, by fleeing ignorance and in pursuing knowledge, would cease to wonder anymore (982b19–21, 983a9–23). On the other hand, the theologians linger or idle gladly in wonder (cf. 1071b27, *Nicomachean Ethics* 1117b33–5). Wonder is perhaps the beginning not only of philosophy.

5. Weston 1929.

6. As Gallop notes, “soul” or “mind” is avoided here (1975, 171). According to Menn, “[we] are surely meant to notice that all of these explanations are failing to mention the soul where the soul is needed” (2010, 55).

7. See Morrow 1993, 446.

8. Aristophanes *Clouds* 364ff.; contrast Hesiod *Theogony* 120–22, Plato *Euthyphro* 8b7–9. Compare Burnet 1930, 14–15, with DK 22.B102 = Graham 2010, 177 and DK

28.A37 = Graham 2010, 233. According to Vlastos, “So far from maintaining natural regularities, Zeus himself and the other gods over-ride them right and left. To do so is their prerogative and indeed provides the main medium of omens, oracles, marvels, punitive thunderbolts, storms, plagues, etc., through which they make known their will to men and enforce it upon them. What could be further from the Justice of the *Aperion* whose laws are cosmic in their scope and natural in their execution? . . . no [doctrine of individual providence] could be squeezed out of Anaximander, or even Xenophanes, Heracleitus, and others who did call nature ‘god’” (1952, 114–15). Finally, cf. Vander Waerdt 1994, 66–75.

9. As for the much debated question of who exactly the Athenian stranger has in mind in this context, I agree with Vlastos that “he has in mind the most mature physical systems, including atomism; but he draws no fine distinctions and makes no honorable exemptions, for he is convinced that all those who sowed the materialist wind must be held responsible for the whirlwind, i.e., the conventional theory of justice” (1995a, 86n.177). Similarly, Mayhew says, “I do not think Plato has in mind particular presocratic philosophers, but simply the movement of ‘atheistic’ natural philosophy in general” (2008, 79)

10. The rebuke leveled by the poets that the philosophers are “dogs” (*Laws* 967c7–d1) is repeated in the *Republic*, where it is also mentioned that they shriek at and refuse to yield to their “masters,” i.e., the gods (607b5–c3)—relatedly perhaps, Socrates’ characteristic oath was “by the dog.” See Aristotle *Metaphysics* 982b28–983a2.

11. Contrast Sharma (2009, 160–62), Bostock (1986, 141–42), Burger (1984, 151, 136–37), Kanayama (2000, 42), Nichols (2009, 197), Roochnik (2004, 98), Sallis (1975, 39), A. Taylor (1956, 200), and Wiggins (1986, 8–9); all of whom I believe misread the text in supposing that Socrates is speaking here of his prescientific opinions.

12. Compare Socrates’ “polite” (cf. A. Taylor 1956, 201n.1) way of saying that natural science is flawed here (96c1–3) with his more sweeping statement of the matter in the *Apology* (19c5–d1, 23a5–b4).

13. According to Grote, “all the ancient physical philosophers concurred” in denying “the generation of new matter out of nothing” (1992a, 54, cf. 90). D.L. 10.38; Lucretius *On the Nature of Things* 1.159–66, 180–90, DK 59.B17 = Graham 2010, 285, 59.B10 = Graham 2010, 289, 22.B30 = Graham 2010, 155. To give a somewhat rough account of Hankinson’s overview of the matter (1998), Anaximander (15), Parmenides (41), Anaxagoras (44), Empedocles (47), Democritus and, it seems, Epicurus (236, 213–14, cf. 49, 17), Plato (110), Aristotle (130, 159), and Galen (239) all accepted what we would call the principle of sufficient reason—as they would have put it, the impossibility for something to come into being out of nothing (*ex nihilo*), that is, without a cause. It is “a fundamental Greek axiom . . . accepted by most Greek thinkers” (Hankinson 1998, 449). Hankinson speaks also of “the deep and abiding Greek aver-

sion to creation *ex nihilo* and complete annihilation” (1998, 188, cf. 225). That is not to say, however, that this principle is a peculiar conviction of certain ancient Greeks; it is, as we will see, of the very essence of science to maintain and defend it. As Hankinson himself notes, “to the extent to which they are explicable, the workings of the universe must conform to the Principle of Sufficient Reason” (1998, 15–16).

14. As Morrow (1993, 479) and Roochnik (2004, 21, 50–57) also suggest.

15. His readiness to take steps in this direction has already been indicated by the fact that he was, in his youth, examining that through and out of which the parts of animals, such as flesh and bone, come to be (96b1–3).

16. The *kai* at 97e2 is epexegetical (Rowe 1993a, 235, 110).

17. See Burnet 1930, 10–12, 14, 363–64. Gallop says that “Socrates scolds his predecessors for not acknowledging any supernatural power sustaining the universe but for thinking to find ‘an Atlas stronger and more immortal than this,’ i.e. a permanent material support to hold up the physical world,” (1975, 176), but of course the young Socrates had a “passion for natural science,” just like his predecessors (171). See also note 6 above.

18. “Air” has pride of place here (compare 99c3–5 with 99b8, 96b4, 98c1–2, 98d8, and 108e5–109a2) because it was “the principle par excellence according to Socrates’ account” in Aristophanes’ *Clouds* (Strauss 1966, 171).

19. I am therefore in agreement with Ranasinghe, who is also led from the young Socrates’ account of human growth to conclude that, “as Socrates puts it, the scientific materialist will not be content until he discovers (or postulates) an Atlas-like figure *on* whom all of the cosmos would rest and *from* whom all motion would necessarily be derived” (2000, 87).

20. Moreover, Aristotle also confirms that the natural scientists’ belief in a first, necessary, and thus eternal being was necessitated, as they thought, by their prior acceptance of the principle of sufficient reason: compare *Physics* 187a32–35, 27–29 (and *On Generation and Corruption* 317b29–31) with 187a35–b1 (and *Metaphysics* 984a31–33). Cf. Bolotin 1998, 23.

21. Socrates says that many of the ancient natural scientists, a group that includes Homer, cloaked their views in poetic or mythological speech (*Theaetetus* 180c7–d1, 152c8–11; cf. *Protagoras* 316d3–317c2). In keeping with this, Socrates interprets a passage from the *Iliad* (7.18–27) in such a way as to attribute to the sun, i.e., a natural body, an event that Homer had explicitly or seemingly at least attributed to the free choice of Zeus (*Theaetetus* 153c7–d5). Socrates’ statement is also supported by a glance at the surviving fragments and testimonies of the pre-Socratic natural scientists. For broad statements about the manner in which they communicated, or were hesitant to communicate, their views, see, e.g., DK 12.A9 = Graham 2010, 51, 28.A19 = Graham 2010, 209, and 31.B9 = Graham 2010, 349. “If open argument can be readily illustrated

in Presocratic philosophy, so too can the deliberate exploitation of ambiguity and paradox” (Lloyd 1979, 228). Empedocles, to give an example of this sort of thing, speaks of the various bodies from which, he argues, bone comes to be in poetic or mythological terms, as various gods (compare DK 31.B96 = Graham 2010, 381, with 31.A78 = Graham 2010, 381). And the same goes for his account of how blood and flesh come to be (compare DK 31.B98 = Graham 2010, 381, with 31.A78 = Graham 2010, 381). As Hankinson correctly notes, to understand these fragments properly they must first be “shorn of their poetic coat” (1998, 47). More generally, in what is clearly an effort to avoid shocking those who hold the customary beliefs about the world and its makeup (see DK 31.B9 = Graham 2010, 349, and compare 31.A22 = Graham 2010, 341), Empedocles calls the beings he regards as the first, most elementary bodies—fire, earth, air, and water—“Zeus,” “Hera,” “Aidoneus,” and “Nestis” (compare DK 31.B6 = Graham 2010, 345, with 31.A33 = Graham 2010, 347; compare 22.B94 = Graham 2010, 165). See also Hankinson’s remarks on DK 12.A9 = Graham 2010, 51, which was cited above: “In describing the passage as poetic in language, Theophrastus (whom Simplicius follows here) presumably took it metaphorically: the Universe does not really follow the dictates of some quasi-divine justice” (1998, 16–17; cf. Vlastos 1952, 114–15). That writings of and about some ancient philosophers are full of “flagrant” contradictions between scientific claims and theological ones—e.g., “Epicurus says that the gods exist. But he also says that nothing exists except bodies and void” (Purinton 2001, 181)—is well established (Kahn 1960; Zeller 1920, 1001, 1004–16; Burnet 1930, 250; Jaeger 1945, 295). And evidence that these contradictions were intentional—e.g., “Epicurus, to avoid offending the Athenians, preserved the gods verbally, but really did away with them” (Cicero *On the Nature of the Gods* 1.85; Purinton 2001, 231)—is not lacking. By suggesting that, in some cases, the theological claims were concessions to customary beliefs, beliefs it would be perilous for intelligent men who did not share them to flout, I have merely supplied an explanation responsive to the historical context which, in addition to facing up to the evidence in its favor, neither sweeps the contradictions in question under the rug nor makes the philosophers out to be unspeakably confused. For further discussion, see Melzer 2014.

22. Hesiod claims that “by mighty necessity” Atlas holds up heaven (*Theogony* 507–20, 746–48; see also DK 28.B8.31–32 = Graham 2010, 217). Homer adds the earth to the “immovable” Atlas’ burden (*Odyssey* 1.51–4). And this may be why Socrates elected to call the fundamental material by that name here. Of course, Socrates makes no allusion to the fact Hesiod for his part mentions: that Zeus assigned Atlas to that role and could therefore dismiss him at will. Notably, in his account of “having” or “holding” (*to echein*) in *Metaphysics* D23, Aristotle says that the poets make Atlas hold up heaven, as if it would otherwise fall to earth, whereas (or rather “with the

result that”) some of the natural scientists (*phusiologoi*) assert that Atlas holds up the broad heaven by mighty necessity (1023a19–21, following manuscript Ab at 21). See DK 28.B10 = Graham 2010, 221, as well as Euripides fragment 910 and Burnet 1930, 10–12, 14–15, and 363–64. As regards Aristotle’s suggestion that Hesiod is a natural scientist, not a poet, see Bartlett 2006.

23. If I am not reading him too literally, then Leibowitz goes too far when he asserts that the young Socrates started from “the assumption that everything perishes” (2010, 69). See also Ahrens Dorf 1995, 174.

24. In book 10 of the *Laws* the Athenian stranger gives a remarkably frank account, to which we have periodically referred before, of pre-Socratic natural science. According to what is said there, the natural scientists named those soulless bodies (“fire, water, earth, and air”), which they held to be “the first of all things” or, alternatively, “the first cause” (891e5–6), “nature” (compare 891c1–3 with 892c2–3, which extends the meaning of “nature” to the motions associated with those things, along with *Phaedo* 96a6–8 and 99c3–5; Morrow 1993, 479). They maintained that all things are generated by the mixing (or motion) of those bodies, which are by nature, “according to chance, that arises out of necessity (889b1–d4). In so doing, they denied the existence of the gods in whom the city believes (886d1–e2, 889c4–6, 889e3–5, 890a2–7, 891e5–9). For the gods, as opposed to such things as “fire or air,” are not soulless or mindless beings (cf. 892a2–d1 in light of Kleinias’ demand at 890d1–8)—and if the first things are soulless or mindless, or natural rather than divine, so too is everything that comes to be through them (889b1–890a9, cf. 967a1–d7). Not only does the stranger make clear that all those “engaged in investigations concerning nature” were atheists, but he also links their political teaching, regarding particularly the merely conventional character of the just and the noble things, to their outlook on nature as a whole (889d6–890a9). And this is in line with Socrates’ suggestion, at the end of the *Protagoras*, that the sophist’s lack of seriousness about the question of virtue, what it is or whether it is teachable, is due at least in part to his acceptance of “Epimethean” natural science (*Protagoras* 361c2–d5, 320c6ff.). For “according to [Plato’s *Laws* 10] failure to grasp the difference between soul and, say, air leads to contempt of the political (or royal) art” (Strauss 1966, 316n.20; 1964, 14–17).

25. According to Vlastos—and I agree with him about this—the pre-Socratics “discovered” the concept of nature (1952, 100). “The very concept of nature, as a domain of unitary, necessary, and intelligible order,” he says elsewhere, “was [the pre-Socratics’] own creation . . . to this extent they may rightly be regarded the creators of the scientific world-view” (1955, 75). See also Strauss 1953, 81ff.

26. Though it might leave room for others: cf. *Laws* 888c5–6, 885b7–8, 886d7–e2, 890a6–7, 890b6–7; *Republic* 365d8.

27. Hesiod *Theogony* 116ff.

28. Aristotle *Physics* 191b20–21.
29. Plato *Cratylus* 393b7–c6; Lucretius *On the Nature of Things* 1.159–66, 180–90; Gospel of Matthew 1.18–25.
30. Aristotle *Metaphysics* 1071b26–27.
31. For these two meanings of “nature,” see Strauss 1953, 83n.3.
32. Of Hesiod, Hankinson says simply “this is not science by any stretch of the imagination” (1998, 8). And Roochnik adds that, “according to Hesiod’s Muse-inspired *muthos*, the beginning of the world is unintelligible” (2004, 14).
33. It would not, for example, be necessary for human beings to die: Hesiod *Theogony* 940–55; Homer *Odyssey* 11.601–4.
34. Zuckert says that the perspective of the natural scientists “left no room for choice or purpose” (2009, 185). Mayhew adds that, “according to the atheists the elements exist by chance because they simply happen to exist and possess the natures they do—without any design or panning or intelligence behind them. . . . But for the theist the existence and nature of the elements is a matter of art, design, intelligence—not chance” (2008, 78). According to L. Pangle, “Students of natural science (among whom Socrates [in the *Phaedo*] quite openly includes himself, at least as a young man) were engaged in an effort to explain the world in terms of natural necessities that would admit of no exceptions; such a project must either assume or prove the nonexistence of providential gods who at any time might, for example, intervene to spirit their favorites out of battle and make them reappear instantly in other places” (2014, 13).
35. “Plato himself in the *Laws* specifies just these theories as being at the root of all irreligious philosophizing, and it would still be true to say that to-day they constitute the speculative basis for most of the current denials of human immortality” (A. Taylor 1956, 177; see note 17 above). Simmias’ objection, if it were applied to gods as well as human beings, would render the former essentially mortal as well. On this point, see Bolotin 2007, 28–29. On the mortality of “gods” in pre-Socratic natural science, see the relevant fragments of Empedocles (DK 31.B21.9–12 = Graham 2010, 357) and testimony regarding Parmenides (DK 28.A37 = Graham 2010, 233) and Anaximander (DK 12.A29 = Graham 2010, 65).
36. As Grote says, “The contemporary public, to whom [Hesiod and the other theological poets] addressed themselves, knew of no other way of conceiving Nature than under the religious and poetical view, as an aggregate of manifestations of divine personal agents, upon whose volition—sometimes signified beforehand by obscure warnings intelligible to privileged interpreters, but often inscrutable—the turn of events depended. Thales and the other Ionic philosophers were the first who became dissatisfied with this point of view, and sought for some ‘causes and beginnings’ more regular, knowable, and predictable” (1992b, 89–90; cf. 1992a, 63). In the same vein,

Irwin says, “Naturalists give arguments (*logoi*), in contrast to the traditional stories (*muthoi*) told about the gods by the poets (Aristotle, *Met.* 1000a9–20). Instead of appealing simply to authority and tradition, they claim to explain natural processes by some rationally convincing principle or argument. In Aristotle’s view, they appeal to a material cause, arguing that if these material elements are combined in the right way, a given result necessarily follows. The appeal to necessity and natural law leaves no room for the traditional Homeric view that natural processes are basically irregular and unpredictable, and that gods can interfere with them or manipulate them as they please. On this basic issue both Socrates and Plato agree with the pre-Socratics; in doing so they challenge widespread and deep-seated religious assumptions of their contemporaries. For in rejecting the Homeric picture of the irregular universe the naturalists also reject the view that we sometimes incur divine punishment” (1992, 52). According to Kirk, Raven, and Schofield, “Thales evidently abandoned mythic formulations; this alone justifies the claim that he was the first philosopher” (1983, 88). And Sheldon Wolin notes that “[the Greek philosophers of the sixth and fifth centuries B.C.] approached nature as something comprehensible to the human intellect, something to be explained rationally without recourse to the whims of gods” (1960, 29). Finally, see Anaxagoras’ blame of what “the Greeks,” as distinguished from the natural scientists, think of generation and corruption (DK 59.B17 = Graham 2010, 285).

37. D.L. 2.12 and DK 59A.17 = Graham 2010, 278. According to DK 59.A113 = Graham 2010, 304, Anaxagoras was called “the atheist.” See also Hankinson 1998, 42. It is reported that Diogenes of Apollonia was almost put to death in Athens (D.L. 9.57) and that Protagoras was imprisoned (DK 59A.18 = Graham 2010, 278). As Plato’s *Seventh Letter* would have it, the historical Socrates was executed for impiety (325b5–c1), and “The fate of Socrates is a reminder not to exaggerate the limits of permissible descent . . . free speech and free speakers came under attack in Athens” (Lloyd 1979, 255). For a survey of notable persecutions in the ancient world, see Morrow 1993, 471–72.

38. Thus, Lloyd says of the difference “between natural philosophy and pre- or non-philosophic thought” that “[it] lies in the fact that the idea that every physical phenomenon has a natural cause is neither stated—nor, it would appear, assumed—as a universal principle before philosophy” (1979, 51).

39. Compare Aristotle *Nicomachean Ethics* 1139b19–24 with *Posterior Analytics* 71b9–16. See also Hankinson 1998, 106.

CHAPTER 3. THE PROSPECTS FOR MATTER IN MOTION

1. Irwin 1995, 155. See note 4 below.

2. After exploring the problem that caused the young Socrates to become disap-

pointed with natural science, Zuckert says that “Socrates thought at first that he had found the solution to his problem in the Anaxagorean thesis that mind (*nous*) is the cause of all” (2009, 184).

3. There is no warrant in the manuscripts for rejecting this reading, as modern editors and translators tend to do. It is evidently rejected on the grounds that it has not been understood. As we will see, however, its meaning is quite clear.

4. Mueller notes, “many (perhaps most) scholars have discussed the puzzles which caused Socrates to seek a new conception of *aitia* with some embarrassment. For first of all we have Socrates giving up on something like scientific inquiry, and then we find him invoking apparently silly sophistic quibbles as his reason for giving them up” (1998, 76). Likewise, Menn points out that these puzzles “have mainly been received in embarrassed silence. The arguments seem sophistical. It seems hard to believe that any earnest inquirer into nature could really have let himself be deterred by them . . . and their grounds seem far too weak to support so sweepingly a conclusion” (2010, 38–39). Irwin says, “These are strange examples of attempted explanations,” and although he does not pass over them in silence, he does nothing to remove their apparent strangeness (1995, 155ff.).

5. “It may be,” says Bolton, “that the proposed explanation which Socrates criticizes, that one person is larger than another ‘by (virtue of) a head,’ is best understood as the suggestion that one thing is larger than another because it has added to it the bulk or quantity of a head. This would make the explanation in question somewhat less peculiar than it can easily seem to be, and it would make it fit more easily with the pattern of explanation which Socrates ascribes to his predecessors” (1998, 102n.14).

6. Aristotle *Metaphysics* 983b6–18.

7. Aristotle *Metaphysics* 984a16–b1. We have reached the point where, as Hankinson puts it, “The general confidence of the early Presocratics in the possibility of their natural investigations was rudely shattered by Parmenides’ argument establishing the conceptual impossibility of change” (1998, 50).

8. This, or something like it, is the view of Stern (1993, 111–12) and Davis (1980, 561).

9. Aftershocks of this contradiction reverberated throughout the young Socrates’ approach as a whole. But in keeping it in motion, these aftershocks sustained it. For it was nothing less than the contradictoriness underlying the natural scientists’ guiding assumption that, as long as it went unnoticed by them, gave them their confidence in its explanatory power. Neither the one strand of that contradiction, nor the other, can furnish much confidence in natural science. Not separately, at any rate. That is, had the young Socrates single-mindedly allowed the form of each thing to be the same as its matter, he would have severed natural science from “the beings” once and

for all. Cut off from its primary subject matter, what would remain of science? Yet had he acknowledged, in place of this, that form is indeed different from matter, he would have left natural science exposed to the very danger it is its task to escape. What each of these strands cannot do apart, however, they can apparently both do together. For, as a young natural scientist, Socrates was inescapably driven by his confused or imprecise grasp of the distinction between form and matter to ascribe to form matter-like characteristics and, then again, to matter form-like ones. That is to say, when he thought of two (once), as formed, he ascribed to it also the matter-like character of its constituent (two) ones. Had he not ascribed to form the character of its matter he could never have reduced it, in thought, to its matter. Then again, in opposition to this, he also ascribed to (two) ones, when he thought of them, as matter, the form of being two (once). But had he not ascribed to matter the character of its overlaying form, he could never have reconstituted that form from it. It was, then, because he was confused about this that the young Socrates was able to assume or believe that form could be *both* reducible to (or the same as) *and*, then again, reconstituted (or different) from matter.

10. Aristotle *Metaphysics* 1069a25–36.

11. See Stern 1989, 196.

12. Nietzsche *Beyond Good and Evil* aph. 11. For “Molière explanation,” see Hankinson (1998, 88).

13. See Davis 1980, 563.

14. For discussion of the various shades of meaning of “cause” (*aitia*), see Vlastos (1969, 292–96); Gallop (1975, 169–70); Bostock (1986, 135). It is typical to propose alternative translations of the word and its variants (“reason,” “explanation,” “responsibility,” etc.) as well as different translations of it when the context, according to the translator’s interpretation, seems to justify recourse to a more familiar word. According to my interpretation, however, because such proposals risk distracting from and even obscuring the question with which the intellectual autobiography is most concerned, the temptation to make them should be resisted. Sayre is not wrong to say that “cause” may be a misleading translation of *aitia* in this context “particularly to someone not favorably disposed to the notion of ‘formal cause’” (1969, 3n.2). But it is the least misleading translation.

15. As Burge has also noticed, but not understood, “in the passage beginning at 96a *aitia* is several times glossed or replaced by an expression involving *dia* (‘on account of’) and an accusative” (1971, 2).

16. Socrates’ remarkable silence may imitate that of his predecessors, since “The early Greek philosophers, so far as we know, did not speak specifically of causes; yet their systems may be considered as attempts to place the ultimate responsibility for the nature of things” (DeLacy 1939, 97–98).

17. Burnet 1911, 106.

18. Nussbaum realizes that to speak in this way about conditions is a significant concession to the outlook Socrates is criticizing (1986, 485n.22). The rejection of “epistemological reductionism” does not necessarily amount to a rejection of “ontological reductionism.”

19. Aristotle *Metaphysics* 983b18–20.

20. See McCabe’s suggestion that Socrates’ intellectual autobiography is focused on “the principles of explanation themselves, as the explanation of explanation” (2000, 65n.25). Similarly, Ranasinghe suggests that, “through his failed scientific investigations [Socrates] discovered that what Aristotle would call ‘efficient’ and ‘material’ causalities were incapable of providing a satisfactory account” (2000, 86).

21. As Rowe also notes (1993b, 60).

22. I am therefore in general agreement with Hackforth’s suggestion that “the reason given by Socrates for his becoming dissatisfied with the pursuit of natural science is not that he doubted the truth of this or that scientific pronouncement, nor yet that the scientists disagreed with one another, but that his study forced upon him the recognition of deeper problems concerning causation, which he had never expected to be problems” (1972, 131). But I wonder how “the recognition of deeper problems concerning causation” would not also serve to call into question “the truth of this or that scientific pronouncement,” insofar as such pronouncements must presuppose adequate accounts of causation.

CHAPTER 4. NOETIC HETEROGENEITY

1. See Burger 1984, 139.

2. According to Rowe, *hōs* at 96e7 is causal (1993a, 233).

3. See Menn 2010, 42–43.

4. Vlastos 1969, 311n.56.

5. See Dorter 1982, 118.

6. Reading *ē* with the manuscripts rather than the editors. See also Sharma 2009, 163n.50.

7. In this regard he was like Empedocles who, according to Aristotle, also divided the efficient cause, or made use of a separating and a combining motion, and yet was also unable to apply the two forms of motion consistently (Aristotle *Metaphysics* 985a21–29). Bolton, too, has made this connection (1998, 103).

8. As Stern (1993, 112) and Benardete (1989, 1) both think as well.

9. Klein 1992, 49, 52.

10. Klein 1992, 21, 74–76.

11. Wittgenstein's "duck-rabbit" figure as well as his "glass cube . . . inverted open box . . . wire frame . . . three boards forming a solid angle" figure are helpful examples of the same phenomenon to which Socrates' argument about the number two points (2001, 165ff.).

12. Stern 1993, 134.

13. Stern 1993, 110.

CHAPTER 5. TELEOLOGY

1. "Tradition recorded by Theophrastus and others [Diels-Kranz, Vors. II., p. 46]—including Cicero (*Tusc. disput.* V 10)—made [Socrates] a disciple of Archelaus, the successor at Athens of Anaxagoras" (Hackforth 1972, 128). Burnet suggests that the "someone" Socrates refuses to mention here is Archelaus (1911, xl–xli; 1930, 256n.3), which would of course explain Socrates' reticence. See also A. Taylor 1917, 85. Even Bluck grants that Archelaus (if not his teacher) was a "mechanistic" and perhaps, it seems, even an "impious" thinker (1955, 106n.1).

2. Contrast McCabe, for example, who claims, "there is no reason to suppose that Socrates resiles from this [teleological] principle, even if the second voyage is not easily construed as a teleology" (2000, 187n.90). But if it is *not* easy to construe Socrates' second voyage as teleology—and indeed, it is impossible to do so, for "Socrates makes it clear that he has renounced the hope of tracing *gignomena* to mind and purpose" (Murphy 1951, 44)—then there *is* reason to suppose that Socrates abandoned teleology. Mueller is correct to say that "in the *Phaedo* Socrates abandons the search for a cosmic good and settles for his own hypothetical method" (1998, 84). The same goes for Irwin (1977, 158), Kanayama (2000, 87), Sayre (1969, 4), Robinson (1953, 142–43), Rowe (1993b, 68), and Vlastos (1969, 297, 298n.15).

3. Stern 1993, 114.

4. "For a large sum," suggests Burnet (1911, 105); for "a fortune," suggests Hackforth (1972, 126).

5. Rowe also takes the remark this way (1993a, 234).

6. Bostock 1986, 144; cf. Ahrens Dorf 1995, 173.

7. According to McCabe, "Socrates' predecessors . . . cite no teleological explanations at all—neither for individual cases, nor for the universe as a whole" (2000, 186). This is also Gallop's position (1975, 176). Jaeger, going beyond this, claims that "Plato says in *Phaedo* that the discovery of the good and of the final cause is the historical turning-point in the philosophy of nature, where the pre-Socratic and post-Socratic worlds divide" (1943, 297).

8. To repeat, Socrates now seeks to know "the cause," not "the causes," of this

(compare 97c6–7 with 96a7–9). It is worth noting that the different terms in the first statement (96a7–9) are separated by “and,” whereas they are separated by “or” in the second statement (97c6–7).

9. See Gallop 1975, 174.

10. Thus, he expected that whatever Anaxagoras might declare (*phrazein*) to him or affirm (*phanai*)—about the form of the earth (97d8–e3), for instance, or about its position vis-à-vis everything else (97e3–98a1), or about the motions (*ta pathēmata*) of the sun or the stars or the other heavenly bodies (98a2–5)—would be supported by an explanation (*epekdiēgēsesthai*). And he believed, more generally, that Anaxagoras would eventually explain (*epekdiēgēsesthai*) to him the best for each thing as well as the good common to all (98a9–b3) or the causes.

11. If I am not mistaken, Stern (1993, 113–14, 117) is the only commentator who has observed even in passing that “orderer” and “cause” are different words and indeed different notions. Benardete (1989, 2) may perhaps give an account very similar to mine—an account which, among other things, does take this difference into consideration—but his writing is, at least for me, so difficult that it is hard for me to say this with certainty. Hankinson, interpreting *Timaeus* 30a, says that “Plato’s Artisan is not, like the God of Genesis, a creator ex nihilo. He is an organizer, working with preexisting materials which impose material constraints on what he can produce” (1998, 109). He does not go on to wonder what kind of “god” such an “organizer” really is, however.

12. Ahrens Dorf 1995, 173; Strauss 1953, 126–27 (but cf. 145–46); Aristotle *Nicomachean Ethics* 1096a17–23.

13. Cornford 1957, 174.

14. To spell this out more fully, one can appeal to Cornford’s thoughtful interpretation of the *Timaeus*. Cornford raises the question whether or not the Demiurge, the divine mind allegedly responsible for the whole, is to be understood on the model of the human craftsmen. “Is the Demiurge in the same position [as the human craftsman] of having to make the best he can of not wholly suitable materials, or did he himself endow the material he uses with all its properties and make them completely amenable to his own control?” (1957, 175). He illustrates the position of the human craftsman by observing that, “If I wish to cut wood, I must make my saw of iron, not of wax. Iron has certain properties of its own, indispensable for my purpose. On the other hand, I can take advantage of this very fact to attain my end. I can make use of those properties to cut wood, though the iron in itself would just as soon cut my throat” (174). The human craftsman is, in other words, dependent on each of the beings as they are already given, by nature, prior to his handling of them. The most he can do is order or move what is given. His position is one of dependence on beings he did not make or cause. If one were to add to this—as indeed one must if the anal-

ogy to the divine mind is to be preserved—that he can do no more than order or move the given beings in such a way as to meet their needs, his dependence can be seen to be complete. The Demiurge, understood in this way, is an accident. And so, if the activity of ordering is responsive to a prior standard (the need of preexisting natural beings), why not admit that standard, rather than the orderer himself, as the fundamental fact?

15. According to his mature view, “it is not possible for bad things to be abolished—for it is necessary (*anangkē*) that something be opposed to the good” (*Theaetetus* 176a5–7). Of the *Phaedo* passage, Rowe says that the reference to the worse is meant “to correct any impression that [Socrates] thinks the universe good in all respects” (1993a, 235). See also Gallop 1975, 175.

16. Strauss 1970, 148–49.

17. As Bostock says, “one might also ask whether it even makes sense to talk of the goodness of the universe” (1986, 144).

18. Rowe discerns a distinction between what is “best for each thing” and what is “best for everything,” and he even asks—either of the latter alone or of the combination of the former and the latter, it is not entirely clear to me—“what on earth could that ‘common good’ consist in?” (2007, 250–51).

19. “The only type of teleologically ordered universe in which we have good reason to believe is a theistic universe,” according to MacIntyre (1998, 152). But what could it mean to say that we have good reason to believe in a theistic teleology if we do not have good reason to believe in a scientific or natural teleology? Perhaps, as he suggests elsewhere, we have good reason to believe in a (theistic) teleology only in the sense that “if we find compelling reasons for accepting a particular view of the virtues and the human telos, that in itself will place constraints on what kind of theory of human nature *and what kind of cosmology* are rationally acceptable” (1984b, 39, emphasis added). See Bruell 1984, 291–92.

20. To spell this out, the reason for this emerges when one considers that Socrates had in the third part mentioned “the good” (*to agathon*) for the first—and, aside from 99c5–6, the only—time. For he uses “good” (*agathon*) on both those occasions to signify what is best (for all things). And he indicates by his use of it that only what is best (for all things) is, as opposed to what is best for each thing, truly worthy of being called “good.” And this would make sense, since in contrast to “good” (*agathon*) “the best” (whether *to beltiston* or *to ariston*) carries with it the connotation—from which, we have already seen, the very notion of what is best for each thing cannot get away—that it is only as good as possible or that it is less than completely good or that it is shot through with the bad. On the other hand, what is best (for all things) is, if anything is, truly or completely good. To speak of “the good” (*agathon*), when it is in fact only a matter of what is best for each of the beings, therefore falls short of preci-

sion; to speak of “the best” (whether *to beltiston* or *to ariston*), a term that carries with it the connotation of some imperfection, is more precise in such cases; and to speak of “the better” (*to ameionon*), which carries that same connotation across still more forcefully, is that much less liable to give the wrong impression. So it becomes apparent, in this light, why Socrates would speak exclusively or consistently of “the better” throughout the part of his account given over to the application of his view of teleology to particulars. Finally, we would expect that the best, being the middle term between the good and the better (the two extremes), would indeed be the most common term used by Socrates here.

21. He was of course unaware that he had in fact expected to learn (two things) about the earth in two different ways.

22. Contrary to the common assumption that in the intellectual autobiography Plato is concerned with “explanation,” not “cause” (Vlastos 1969), whatever that may mean, this suggests that “explanation” cannot be intelligibly separated from “cause.” As Sedley notes, “it can hardly be denied that finding the cause of something may often play a crucial role in explaining it” (1998, 122). Cf. Fine 1987, 69ff.

23. In connection with this, to express the notion of “cause” Socrates uses both *aitios* and *aition* in this passage—and in this passage alone—but not *aitia* (Mueller 1998, 83). Socrates makes use of multiple terms for “cause” here for the same reason he makes use of multiple terms for “good.” Contrast Wiggins 1986, 7n.8, 17–18.

24. I therefore largely agree with Sedley that “neither the ancient nor the modern commentaries on the *Phaedo* notice that it is in that very dialogue that Plato sketches an answer to the teleological questions raised in it” (1995, 359). I understand Plato’s answer altogether differently than he does, however. Again, Stern’s suggestion, “that in [Socrates’] treatment of Anaxagoras’ thought lies a reason to think that a teleological account is unavailable,” hits the mark in my view (1993, 114).

25. Aristotle unobtrusively mentions the problem caused by these two elements of teleology at *Metaphysics* 988b6–16.

26. See Burger 1984, 140.

27. Recently, Thomas Nagel proposed natural teleology as a viable alternative to “the materialist neo-Darwinian conception of nature,” which, he argued, is almost certainly false (2012). But he apparently wavered as to whether a nontheistic teleology is an intelligible possibility. On one hand he said, “the idea of teleological laws is coherent, and quite different from the idea of explanation by the intentions of a purposive being” or a god (66). And on the other hand he said, “I am not confident that this Aristotelian idea of teleology without intention makes sense, but I do not at the moment see why” (93, cf. 67). Nagel wavered on this point because natural teleology both excludes and requires “intention,” as we have seen (cf. 97). Much like Socrates, then, Nagel was confused. And his interest “in the territory between [theism and

materialism],” as he himself put it, was apparently due to the fact that although he found something “lacking in each of them,” taken individually, he nevertheless hoped that the collection of both—“mind . . . as a fundamental principle of nature along with physical law”—would not lack what he found lacking in each of its parts (22, 25ff., 32-33, 59, 67-68, 92). “Nonpurposive” (67) or “naturalistic” teleology (93) is nonsense, however. And his account of what teleology is was hopelessly obscure as a result (91-3; cf. McGinn 2013, 584-55). Moreover, Nagel’s critique of “reductive materialism” was not much more sufficient than his grasp of a “secular,” teleological alternative to it. He assumed that life in general, and especially human life, is the most astonishing, significant, or notable thing in the universe (7, 32, 67). And so if “psychophysical reductionism” is false, and Nagel argued that it probably is, then this ostensibly “threatens to unravel the entire naturalistic world picture” (3-5, 7-8, 35, 43). Nagel erected his critique, therefore, on the basis of the so-called mind-body problem as it is popularly conceived; he betrayed no inkling of its true scope and depth (noetic heterogeneity). Connected with this, he sought a solution to the problem along the lines of what is merely “probable” or “likely” (6, 9, 10). In other words, whereas the Socratic critique has to do with the transparency of the “schema of explanation” on which “reductive materialism” relies—the schema itself is, according to that critique, necessarily (not probably) derivative, incoherent, and incomplete—Nagel took the transparency of the schema for granted. Passing over the “schema of explanation” itself, and thus leaving it intact, he sought to establish the conclusion that the schema is probably (not necessarily) inapplicable when it comes to phenomena associated with the mind (6). But even if Nagel had somehow established this conclusion, could the appropriate response not still be hope of progressing in natural science? That said, Nagel’s book was by no means unwelcome. So far from having “gone mad or become a born-again Christian” (O’Grady 2013, 484), as the very least of his many, all too often ungenerous critics maintained, Nagel was searching for science.

28. For this view of the first sailing, see Gallop 1975; Hackforth 1972; Huby 1959; Patterson 1965; Rose 1966; Vlastos 1969; Dorter 1982. But contrast Davis 1980, 559, 562.

29. “Suppose there are dimensions of reality that science cannot reach. If there are, then scientific naturalism—the belief that scientifically knowable nature alone is real—is unreasonable since it arbitrarily cuts off access to any such precincts. And if scientific naturalism turns out to be at bottom an irrational set of beliefs, then the universe available to science may not be ‘all there is, all there ever was, or all there ever will be’” (Haught 2006, 7).

CHAPTER 6. SCIENCE AND SOCIETY

1. Ahrens Dorf 1995, 173–74, 9–14; Stern 1993, 129–30.

2. For other uses of the expression, see *Statesman* 300c2, *Philebus* 19c2–3; Aristotle *Politics* 1284b19, *Nicomachean Ethics* 1109a34–5; Menander fragment 241. See also Bluck 1955, 200n.11; Kanayama 2000, 88. I agree with Rowe that *deuteros plous* “is likely to have a double meaning here: i.e. something which is second-best, as well as more laborious” (1993b, 69n.37). After all, “Formal causes are less satisfactory than final causes,” as Rose says, “because formal causes do not explain coming-to-be and passing-away” (1966, 469).

3. Burger 1984, 147–48; Dorter 1982, 127; Gallop 1975, 176; Gulley 1952, 78; Huby 1959, 13; Kanayama 2000, 91; Ross 1982, 20; Shipton 1979, 35; Verdenius 1958, 220

4. Wagner and Clement 1896, 145. “Divine inspiration,” according to Robinson 1953, 145; “some word of God,” according to Hackforth 1972, 97. See also Dorter 1982, 127.

5. Bolton suggests that what Plato does in the *Phaedo* “is to reject the possibility of a coherent physics, or *science of nature*, altogether” (1998, 93).

6. According to Wagner and Clement (1896 ad loc.), Simmias’ talk of being carried by a ship is a modification of the Greek colloquialism of being carried by hope. That colloquialism, in its unmodified form, is used later on by Socrates (98b7–8).

7. As regards the second sailing metaphor, although it is well known that Socrates merely follows Simmias’ lead, it is much less well known that Simmias merely follows Homer’s—in fact, so far as I am aware, only Kanayama has considered this link (2000, 92; but cf. Kahn 1996, 314; Freccero 2010, 86). According to Homer, when Odysseus was allowed by Calypso to leave her island he made his way homeward over the sea on “a raft” (*schedia*), which he skillfully put together for that purpose (*Odyssey* 5.241–62; however, Socrates’ method was “pieced together at random” [97b6–7]). It was equipped with a sail, and Calypso saw him off with a fair wind (263–69). This is, as it were, Odysseus’ *first* sailing. A *second* sailing became necessary, however, when Poseidon caught sight of him sailing home from afar; angry at Odysseus, and intent on punishing him, the god called up a terrible storm (282ff.). The mast and sail broke off from Odysseus’ raft and fell into the sea (313–18). To save himself, Odysseus clung to his raft, which, because it now lacked a sail, was tossed to and fro by the sea as well as by the wind (319–32). In this perilous situation, Odysseus was approached by a goddess, Ino, who offered him her aid. Presenting a *third* course—that is to say, “some divine account”—she advised him to abandon his raft to the sea and, even though land was nowhere in sight, to swim to shore; she also gave Odysseus a veil that she asserted, at any rate, would protect him from harm or death if he did just as she said (333–53). However, because the course of action she recommends appears so preposterous (suicidal) from the point of view of human reason (334–64), Odysseus refused

to take her at her word. Instead, mistrusting her, he waited until his raft was utterly destroyed by the storm and only then, when there was nothing else for him to lose, that is, when all reasonable hope was lost, he abandoned the raft and donned the veil the goddess gave him (365–75). Odysseus for his part did everything humanly possible *not* to rely on Ino's "divine account." But in the end, after his raft (without a sail) had succumbed to the sea and the wind, he did. (Remarkably, even with the goddesses' veil, it took almost another three days for Odysseus to reach land [388–90], and during that time Athena had to intervene on his behalf not only to calm Poseidon's storm [375–87] but also to save him, twice, from gruesome deaths [424–27, 436–37], which means Ino's words were not simply true; moreover, Odysseus had to pray to yet another god whose timely intervention was needed to save him from death [444–53].) The three carriers that Simmias outlines in his statement clearly correspond to the three modes by which Odysseus makes his way homeward over the sea; and the first and second sailings to which Socrates himself refers clearly correspond, for their part, to the first and second of the three modes (as well as to the first and second carriers Simmias outlines). Perhaps this link accounts for Aristotle's substitution of Calypso for Circe at *Nicomachean Ethics* 1109a30–35.

8. The account is of Socrates' own making; it is not traced to Anaxagoras; it is merely something "someone" (of whom he was reminded by Anaxagoras' books) might say.

9. As Nussbaum says, "Plato here offers us, apparently, a choice between two patterns of explanation: explanation by physiology and explanation by reason and intellect" (1986, 272).

10. Rowe 1993a, 237.

11. Gallop senses a "wry contrast between morality and expediency" here (1975, 175).

12. Recall in this context Socrates' "garrison" language (62b1–c8; *Crito* 51a7–c3, 52d1–3; *Apology* 28d6–8, 38e5–39b1), which is a consistent and thus paradoxical expression of "communitarianism."

13. In some sense, then, the end (*telos*) of the city is death (*Laws* 632c1, cf. 801e7–8).

14. See Barney 2010, 363, 371. In connection with this, Sedley says "the teleological explanation of Socrates sitting in prison is (98e) that 'since (a) it has seemed better to the Athenians to condemn me, for this reason (b) it has seemed to me too in my turn to sit here, and more just to stay and face whatever penalty they impose.' Here we might I suppose take it that the bad situation (a) is a failure of intelligence . . . the morally good act (b) a success of intelligence, in achieving the good that it invariably aims for" (1998, 126n.13). But is it not absurd to say that to obey a failure of intelligence is a success of intelligence? Or is this the very thing that Sedley, for one, means by "morally good act"?

15. And not only has this suggestion been made by Socrates prior to this, but its basis has been spelled out as well. Simmias' previous objection to Socrates' arguments (or myths) in support of the soul's immortality took the form of an exposition of the natural scientist's approach to the matter. There, the soul appeared, as it appeared to the young Socrates, too, to be nothing but a "compound" or a "tuning" (92e5–93a2, 92a7–9) of bodily materials or elements (compare 86b5–d1 as well as Socrates' restatements at 91c7–d2 and 92a6–c3 with the report of the natural scientist's approach at 96a5–c1 and 98c2–d8). And so by responding to Simmias' objection, as indeed he went on to do, Socrates responded also to this understanding of the soul. And his response (92e5–95a2) developed along the same lines as our discussion of what he has just implied in regard to his own situation.

In brief, he argues in the second and central part of his response (93a11–94b3) to Simmias that it follows from the hypothesis that the human soul is a tuning that "what is said" (93b9, 93c1–2) about the soul, namely, that it may have either virtue or vice "in" it (93c4), is untrue. For if soul is, as such, a tuning or tuned, it seems no (moral) distinction can exist between one soul and another with respect to its being, or not being, a tuning or tuned—and it is hard to see, at any rate, how else the presence of virtue or vice in it might be accounted for (see 93e7–94a10). Strangely enough, though, Socrates refrains from actually reassessing the truth of "what is said" (about the existence of a distinction between the virtuous and the vicious) in view of the natural scientist's hypothesis; instead, he urges Simmias to reject that hypothesis, in whose light "what is said" appears false, on the grounds that what follows from it is not noble or beautiful (compare 94a12–b3 with 93b9–c2). And yet, is the truth of a hypothesis properly decided by its beauty or its lack thereof (see, for example, 70a7–b5)?

Besides the fact that the natural scientist's tuning hypothesis is rejected on the basis of its alleged incompatibility with a standard (beauty or nobility) that is irrelevant to its truth, Socrates goes so far as to indicate that it is, on closer inspection, not actually incompatible with that standard at all. According to the indications Socrates gives here, in other words, such (moral) distinctions as, "it is said," exist between one soul and another can in fact be accounted for if the soul is a tuning or tuned. For it is one thing to be a tuning or tuned; it is another thing entirely to be a more or less *widespread* tuning.—In general, the importance of Socrates' careful use in this context of *mallon* and *ētton*, on one hand, and *epi pleon* and *ep' elatton*, on the other, is ignored or overlooked (Gallop and others acknowledge that there is a distinction but think it is of "minor importance" [1975, 159]). But he begins by raising the possibility that a tuning may become *both* more (*mallon*) or less (*ētton*) of a tuning *and*, alternatively, more widespread (*epi pleon*) or less widespread (*ep' elatton*) of a tuning (93a14–b3; Burnet [1911] rejects this, but see Gallop [1975, 159–60] who follows Hicken

[1954, 20] and Bluck [1955, 100n.1, 198]). And, after rejecting this possibility as a whole (93d3–4) on “fallacious” grounds (93d1–3; Gallop 1975, 162), he goes on to reject the first part of it alone on true ones: that is, since a tuning is just what it is, a tuning, it cannot be more or less of a tuning (93d6–7). By doing so, of course, he leaves the second part of the possibility fully intact. And perhaps for this reason he persistently refers in what follows to this remaining option, that what is neither more nor less tuned (because it is just what it is, tuned) can participate more or less widely in tuning, even after it has been “rejected” by him (93d9–10).—And so long as the soul is a tuning that can, as a tuning, be more or less widespread, as in a scale whose essential notes are all represented but in different degrees, for instance, it is not impossible to account for the differences that exist between souls and, simultaneously, for the essential sameness of all souls as such. The former are more or less widespread tunings, the latter is just the tuning itself. And yet if the tuning hypothesis of the natural scientist is actually compatible with “what is said” about virtue and vice, insofar at least as it is, as Socrates suggests, compatible with the existence of (moral) distinctions between one soul and another, what becomes of the purpose or status of his argument here?

An answer to this question begins to emerge when one perceives that Socrates’ argument here (93a11–94b3) is just the first part of his response to Simmias’ objection. It is enclosed by another part or argument (92e5–93a10 and 94b4–95a3; see Bostock 1986, 126; Gallop 1975, 158; Stern 1993, 100). And, by enclosing his second or, better, central argument within a peripheral one, Socrates indicates that the two are somehow linked or bound up with one another; they are two parts of one whole. And surely that link would, if clarified, clarify in turn the purpose or status of the central argument, too.

As for the peripheral argument, then, it has two parts (92e5–93a10 and 94b4–95a3). Socrates contends in its first part that a compound or a tuning cannot “move” or “utter sounds” in opposition to its materials or elements (92e5–93a10; see Gallop 1975, 167). Or, to put this more exactly, what a compound or a tuning can do as well as suffer depends on what its materials or elements can “do or suffer” (93a4–5). And in its second part (94b4–95a3) Socrates considers the hypothesis that the soul is a compound or a tuning of “hot and cold and dry and wet and other such things” (86b9–c1, 96b2–4) in the context of this contention (compare 94c3–7 with 92e5–93a10). He proposes, in short, that if the human soul is a tuning, as the natural scientists say (96b3), it could not perform the deeds (cf. 94c9–10) that “we see” (94b10) it perform. The standard to which he appealed in his central argument, i.e., “what is said,” is therefore replaced by a new one: the deeds that “we see.” And he observes, in particular, with regard to the new standard, that “we see” the soul dragging the body in ways opposed to, among other of its desires or impulses, its thirst or hunger (94b8–c1), and “we see,” more generally, that it frequently opposes, by various means, the body’s

desires and natural impulses and fears (94c9–d6). (Such deeds are attested to not only by what “we see,” however. Socrates also appeals here to the authority of a “divine poet” [95a1–2], Homer, who “poetically” said of Odysseus that he opposed his own anger [94d7–e6]. He thus brings it about that what “we see” appears to be in agreement with what we hear, through an intermediary, from the god or gods.) Apparently, when considered in the context of Socrates’ earlier contention, these observations lead to the conclusion that the tuning hypothesis is false (95a4–6). As Socrates admits in passing, however, this conclusion is reached here only “somehow” and “as it seems” (95a5).

The tentativeness with which he states his conclusion is not unjustified. On closer inspection, the deeds that Socrates cites here as evidence against the tuning hypothesis are not actually incompatible with it. Simmias, in his exposition of that hypothesis, had identified the materials or elements of the tuning or the soul with characteristics of bodies, such as “hot and cold and dry and wet” (86b9–c1). And this makes sense. At present, though, Socrates for his part, absurdly, and without acknowledging that he is tacitly modifying the hypothesis he is supposedly disputing, identifies the materials or elements out of which the soul is constituted, not with such bodily characteristics as “heat” (94b8), but with the desires or impulses (94c10–d1): thirst and hunger (94b8–c1), desires, impulses and fears (94c9–d6) and anger (94d7–e6). In so doing, he creates the impression that what “we see” of deeds performed in opposition to one or another of the desires or impulses suffices to refute the hypothesis that the soul is a tuning, since, according to Socrates’ earlier contention, a tuning cannot act in opposition to its materials or elements. But that impression is misleading. The new identification on which it depends is both absurd and unwarranted by the tuning hypothesis itself: the materials or elements of the soul are not the desires or impulses, which cannot even exist apart from the soul, but characteristics of bodies. In fact, the desires or impulses themselves, as Socrates had indicated by associating “thirst” with “heat” (94b8), may have to be traced to such bodily materials or elements as constitute the soul (Gallop 1975, 167). And so the opposition to the desires or impulses that “we see” cannot be cited as evidence of the soul’s opposition to its materials or elements. What “we see” shows, at most, that *something* opposes one or another of the body’s desires or impulses. But what exactly opposes a desire or impulse may just be, in the end, another impulse or desire; or, as Gallop puts it (1975, 167), perhaps “the soul’s so-called ‘opposition’ to the body,” which is something that “we see,” “is itself simply the effect of a bodily state.”

As a matter of fact, this is all but said by Socrates here. There is, apart from his qualification of the extent to which the soul is opposed to the body (94d1), his tongue-in-cheek appeal to “gymnastics” and “medicine” (94d3–4; for their association with natural science, see *Laws* 889d4–6 and *Symposium* 186e4–187a1)—arts that are always, even when they impose restraints on thirst or hunger, for instance, manifestly in the service of the body’s

desires or impulses (*Gorgias* 464b2–8)—as examples of opposition to the body's desires or impulses. And the example of Odysseus, to which he appeals in the next place, merely goes to show that anger, or the desire for revenge, can be temporarily restrained, in anticipation of a more opportune moment for its release, in the face of a calculation that takes into account the fear of death. As it turns out, then, the tuning hypothesis is fundamentally in agreement with the reductive account of “political virtue” that Socrates developed prior to this (compare 82a12–b2 in context with 68c5–69d7). And it, moreover, no less than that account, is also compatible with the phenomenon, so far as “we see” it, at any rate, of courageous and moderate deeds. For those deeds may be animated, not by opposition to the desires or impulses as such, but by calculation as to which of the desires or impulses it is, and is not, most necessary to satisfy. And, with that, the purpose or status of Socrates' peripheral argument, too, withdraws from sight.

The purpose or status of Socrates' peripheral and his central argument, too, becomes clear at last when they are viewed in just the way they are presented by Socrates here; that is to say, as linked or bound up with one another. The tuning hypothesis is, it turns out, compatible with distinctions between human souls as well as with what “we see,” at any rate, of moderate and courageous deeds. However, since “what is said” of the moral distinctions between human souls presupposes the possibility of *truly* moderate and courageous deeds—deeds which are truly, and not only apparently, selfless or noble; deeds which are animated above all, not by desires or impulses, but by the free choice of an end that somehow transcends the self—the tuning hypothesis (i.e., “materialism”) is indeed logically incompatible with moral distinctions.

16. As Nichols says, “If Anaxagoras were right that the only causes at work are material, Socrates would escape rather than accept the penalty” (2009, 202).

17. “Surely it makes no sense to suppose that man has a purpose, and that the good man is the one who fulfills that purpose, unless we also suppose that the purpose really belongs in some mind that designed and created man with a particular end in view” (Bostock 1986, 145). No doubt partly because this supposition is so hard to fathom, Strauss thought that the ordinary moral distinctions “are exposed to grave theoretical doubts” (as cited in Rosen 2003, 128).

18. Of their “attack . . . against the political order in the name of nature,” Wolin says that the sophists were “following the path of the earlier nature philosophers.” Starting from the “antithesis between ‘nature’ and ‘convention’ (*physis* and *nomos*),” the sophists—and also the pre-Socratics, he seems to say—concluded that “political rules” are “false or disadvantageous” (1960, 30–31).

19. Cf. the exemplary statement of Heraclitus: DK 22.B102 = Graham 2010, 177.

20. Cf. C. Taylor 1964, 3–5, 42–43, 54.

21. In the absence of divine providence, Socrates' willingness to die would, he says, be unjust (63b9–c4). For further discussion, see Bolotin 1987, 53ff.

22. Ahrens Dorf 1995, 173; Stern 1993, 138.

23. Socrates has now become aware that he knows of nothing more than “another form of faith, a *counter-faith*” (Leibowitz 2010, 67) that might serve as a basis for refusing to believe in such gods as support (*Crito* 54b3–d1) and are supported by (*Timaeus* 40d6–41e3) the city and its laws.

24. Nichols suggests that, although Socrates’ sitting is explained by what seems better to the city, “It is only what seems better to Socrates—and to his companions—and not what seems better to the city that explains [his conversing]” (2009, 201). My own reading differs only slightly from hers.

25. Socrates, Cicero says, had to “compel” philosophy to inquire about the human things (*Tusculan Disputations* 5.10). To be clear, compulsion was required because, notwithstanding the fact that a truly open-minded reckoning with the opposing view of man’s good or end would now appear to be possible, pious, and necessary for the philosopher, it would be hard *at the outset* even to imagine how a conclusion about the character of the whole could ever come of such an inquiry.

26. According to Bolotin, “[Socrates] turned his attention to the possibility that men’s greatest errors about ultimate questions are rooted in confusion about the human things” (2001, 8). See Chapter 5, note 19 above.

27. As Kanayama puts it, “for Socrates the difference between the first voyage and the second does not lie in their destination but in their methods” (2000, 89). See also Sharma 2009, 149; Bostock 1986, 157; Bluck 1955, 113; Stern 1993, 118. But contrast Murphy 1951, 145.

28. Leibowitz 2010, 97n.70.

29. See Maimonides *Guide of the Perplexed* II.23.

CHAPTER 7. DIALECTIC

1. Bostock 1986, 162.

2. As Murphy says, “[Plato] speaks of looking at the reflection of the sun rather than the sun itself and so suggests (a) that we are to study the *logoi* of things rather than the things themselves, and (b) that the *logoi* are in some sense or other ‘reflections’ of the things. Neither (a) nor (b) can really be intended and are revoked by his own disclaimer in 100a” (1951, 43).

3. Bostock acknowledges that this causes “something of a dilemma” for the conventional view that Plato (Socrates) is a partisan of the separate forms (1986, 158). See also Gallop 1975, 178.

4. As Kanayama notes, the passage “does not mean that one should make no use of the senses . . . Socrates continues to employ the senses” (2000, 45, 49).

5. I am therefore in agreement with Stern's statement that, "being blinded then seems to mean missing what is, strictly speaking, invisible. It means to miss the need for formal causation or the class-character or idea of something" (1993, 113). See also Ahrendorf 1995, 170–71. Kanayama observes in connection with the earlier account of the natural scientists' blindness (99b5)—an account probably inspired by the game of "blind man's bluff" (Verdenius 1958, 230)—that "they grope about, relying on touch, the sense considered to be most appropriate for catching material things" (2000, 43n.6).

6. Stern 1993, 120.

7. Compare Zuckert's remark that "Socrates' 'second sailing' thus constituted an improved understanding of the character of his own activity" (2009, 186) with her suggestion that *ta erga* refers to "the 'deeds,' acts, or effects we perceive with our senses, but only with the assistance of our intelligence" (185). A relevant example of unconscious reliance on mental perception would be the use modern natural science makes of "physical law," which is a *contradictio in adjecto*.

8. Strauss 1953, 124. Wolin says that "the multiplicity of conflicting things was [in pre-Socratic philosophies] believed to be merely surface to their essential unity; hence, the explaining principle was not derived from many 'types' of phenomena" (1960, 29). And compare McCoy's suggestion that, with Socrates, "philosophy had advanced beyond the stage where it had sought some one universal nature—water, air, fire, numbers, or even absolute being—as the ultimate substance of everything. Socrates had, on the contrary, engaged it in the task of determining and defining the essence of each thing by genus and difference, by a concept proper to itself alone" (1954, 1060). "What Socrates intends to explain," according to A. Taylor, "is what we have learned from Aristotle to call 'formal' causality" (1956, 202).

9. See Bolotin 2007, 38–39. According to Ranasinghe, Socrates eventually "realized that moral values are not derivable from a purely mechanistic account of creation—an anticipation of David Hume's more celebrated claim that it is impossible to derive an 'ought' from a description of what 'is'" (2000, 88).

10. On the distinction between "what is said" and "seen," see Chapter 6, note 15 above.

11. See Gallop 1975, 177.

12. Thucydides *Peloponnesian War* VII.50.4 (cf. I.23.3), DK 59A.18 = Graham 2010, 279, *Republic* 508a4–8. See also Thucydides *Peloponnesian War* I.21.8, II.54.5, II.59.1, II.64.1, III.89.1, VI.95.1, V.45.4, V.50.5, VII.50.4, VII.79.3, VIII.6.5.

13. See, e.g., DK 12A.11 = Graham 2010, 57, 12A.22 = Graham 2010, 59; 59A.42 = Graham 2010, 297, 31B.42 = Graham 2010, 375; 67A.1 = Graham 2010, 542–43. Among other things, Plutarch says that Anaxagoras' naturalistic explanation of eclipses had to be "whispered in secret with caution" because "the people did not put up with natural philosophers . . . who attributed divine events to irrational agencies, indiffer-

ent powers, and necessary effects” (DK 59A.18 = Graham 2010, 279). Was their critical stance toward the divine to blame for the fact that “a high proportion of the [pre-Socratic] theories and explanations recorded relate to phenomena such as lightning and thunder, earthquakes or eclipses, that were either terrifying or rare or both and that had often, in mythology, been associated with gods” (Lloyd 1979, 32–33)? For evidence that it is, see *Phaedrus* 229b4ff. as well as Aristophanes *Clouds* 364ff. See also Chapter 2, note 8 above.

14. I therefore part ways with those who look to the *Republic*’s sun imagery to explicate the reference here to a solar eclipse (e.g., Stern 1993, 120).

15. Leibowitz 2010, 99n.72.

16. See Burger 1984, 148; Ahrens Dorf 1995, 175.

17. Hoinski’s suggestion that Socrates opts to give an intellectual autobiography because autobiography “lends persuasive power to his arguments by their confidential quality” (2008, 351–52) overlooks the fact that, according to both Socrates and Cebes, Cebes does not understand what Socrates says. On the other hand, if to persuade is not to teach, then there may be something to Hoinski’s suggestion.

18. See Stauffer 2010, 112–13.

19. According to Bryan Garsten (2006), the belief that what is “revealed in action” is more important than what is “articulated in argument” “drives modern behavioral political science” today, and this belief has its roots in Machiavelli (20–21). In keeping with this, after World War II, political theory was dislodged from its place at the core of political science and set in motion toward the discipline’s periphery in part by the claim of the emerging “modern behavioral political science” that political theory was “more interested in prescribing how people ought to behave than in describing how they actually do behave, and explaining why” (Ball 2007, 3). See also Bartlett 1994, 381–82.

20. For a discussion of the heroic nature of Socrates’ death, see Greenberg 1965. See also Brickhouse and Smith 1989, vii–viii; Reeve 1989, 184; Frede 2006, 190. Rousseau says of Socrates that “he rose up against the sophists as did Jesus against the Priests, with this difference that Socrates often imitated his adversaries and that if his noble and gentle death had not honored his life, he would have passed for a sophist like them” (2000, 269).

21. According to research done by Kristen Monroe, “Even when confronted with the systematic state torture of the Nazi regime, the rescuers [of Jews in Nazi Europe] risked their lives and those of their families to save strangers. They did not pursue their own self-interest. Nor did psychic gratification serve to disguise a thinly veiled self-interest. Honor or praise were not sought, and despite the fact that their actions were well documented by others, all the rescuers minimized their actions, even as they told us of being arrested many times or being persecuted for their rescue activ-

ities. The existence of such altruistic behavior, no matter how rare empirically, poses a significant theoretical challenge to any theory founded on self-interest” (1991, 83–84).

22. Strauss 1953, 146.

23. Cf., e.g., Kant 1996, 286.

24. “If we only translate literally,” according to an indispensable suggestion of Burnet, “and avoid loose ‘philosophical’ terminology, there is nothing in the doctrine here set forth which should be unintelligible to anyone who understands a few propositions of Euclid and recognizes a standard of right conduct. . . . The geometer makes a number of statements about ‘the triangle.’ . . . Of what is he speaking? Certainly not of any triangle which we can perceive by our senses. . . . The next step is to extend [the theory] to such things as ‘right’ [*dikaion*] and ‘beautiful’ [*kalon*] . . . *to dikaion* and *to kalon* must be real in the same sense as ‘the triangle.’ We have never had experience of a perfectly right action or a perfectly beautiful thing, yet we judge actions and things by their greater or less conformity to what is ‘just right’ [*auto dikaion*] or ‘just beautiful’ [*auto kalon*]” (1911, 32–33). Compare Bruell 1999, 88; Strauss 1964, 119–20.

25. Bruell 2013, 20.

26. See Chapter 6, note 21 above.

27. So I agree with Robinson that Socrates “does not say quite all that he means” here (1953, 128).

28. Displays are not Socrates’ usual way (cf., e.g., *Gorgias* 447b1–c4). Taking note of this, Wagner and Clement believe that “there is a touch of irony in *epideixis*, which was the expression for the pretentious display of demonstrative power made by the Sophists” (1896, 163).

29. See Gallop 1975, 179; Dorter 1982, 124; Vlastos 1969, 306; Shipton 1979, 42–43; Frede 1978, 28. But contrast Ahrens Dorf 1995, 176. Meinwald realizes that the “attribution to Plato of a . . . theory that can only be nonsense is a problem” (1992, 390).

30. Vlastos 1969, 297.

31. According to van Eck, “one of the difficulties in Plato studies is that of providing . . . an interpretation . . . which accounts for the fact that all of those present at Socrates’ last discussion—as well as the two participants in the dialogue, Phaedo and Echecrates, agree on the clearness of Socrates’ words up to 102A1, ‘even for someone of small intelligence’ (102A4–5)” (1996, 211). Sayre says that “the remark of Echecrates should cause considerable embarrassment to the commentator who is unable to find a coherent methodology in *Phaedo* 100A–101D” (1969, 39n.51). And “we have the odd situation,” says Rowe, “that what readers and commentators currently regard as one of the obscurest parts of the dialogue (and perhaps even of Plato) is actually received by its fictional audiences as a plain statement of things which could not reasonably be disputed by anyone” (1993b, 50). Sayre says there are three solutions: “(1) that Simmias and Cebes are confused, (2) that Plato is confused, and (3) that the commen-

tator himself is confused. But,” he then asserts, “Simmias and Cebes have shown themselves remarkably clearheaded throughout the dialogue” (1969, 39n.51). Rowe says there are four solutions: “(1) that the author knows better than his characters, and is laughing up his sleeve at them and us in having them pretend to find Socrates’ account clear when it is not; (2) that the account is meant to be clear, when in fact it is not; (3) that in finding it unclear, we are not seeing one or more important clues; or (4) a combination of (2) and (3)—the author has not given us all the necessary clues, and we have missed some of those he has given” (1993b, 50–51). But it is “easy enough” to eliminate the first, he adds straightaway, because “99–102 is designed to provide the basis for the last argument for immortality, which offers every indication of being serious.” Now, as regards Sayre’s hasty elimination of his first solution, if Simmias and Cebes have not shown themselves “remarkably clearheaded,” and they have not, then the first and last solutions could coincide and Plato would be freed from confusion. As regards Rowe’s hasty elimination of his first solution—to say nothing of the fact that the last argument only concludes, rather laughably, that “the god, the form of life itself, and anything else that may be deathless” will not perish (106d5–7)—if we are truly entertaining the possibility that Plato “knew better” with regard to “99–102,” *why not* entertain possibility that he “knew better” with regard to the final argument too? Assuming that Plato “knew better” regarding the former, is it not likely and perhaps even necessary that he “knew better” regarding the latter? The difficulty that causes so much embarrassment to scholars has a solution that is unlikely to get a hearing if only because it is still more embarrassing to them than the difficulty itself. In the meantime, however, studying Plato is sure to remain a “dispiriting business” for them (Barnes 1995, xv–xvi).

32. Stern 1993, 122.

33. Furthermore, “Socrates refrains from reporting to Cebes (or to Glaucon in the Piraeus in 429) the other great event Plato made available from Socrates’ youth with respect to the ideas,” namely, “Parmenides’ sobering, irrefutable demonstration that [the separate ideas] had insurmountable logical difficulties” (Lampert 2010, 330–31). Parmenides’ refutation of the young Socrates’ hypothesis of the separate forms is therefore replaced, in Socrates’ own account of his intellectual development, by a display of it. If the former is somehow embedded in the latter, then the difficulty would vanish.

34. See Sharma 2009, 158; Hackforth 1972, 142; Stern 1993, 144–45; Ahrens Dorf 1995, 176–77.

35. See Sayre 1969, 12. Contrast Vlastos, who takes “the [biography] at 96E–99E . . . to be Platonic, not Socratic, biography, since its stated purpose is to introduce the theory of Forms (100Aff.)” (1991, 47n.11). But this is nowhere stated to be the purpose of the autobiography; its “stated purpose” is to respond to Cebes’ (ambiguous) objection.

36. And this remark cannot be dismissed, indeed, no remark of Socrates can be dismissed, as Burnet and others would seem to think, merely because it seems to be an example of “irony” (1911, 111; Ross 1982, 19n.1). For what is it that is meant by the irony, if such it really is (cf. Benardete 2000, 407)? And, still more importantly, how can we be sure that a given remark is ironical in the first place? As Burnet’s own interpretation of this example goes to show, Socrates’ reputation for irony along with the incompatibility of his remark with what almost everyone “knows” about his views already, means that he could be sure that he would not be taken seriously by almost everyone in making it. And so perhaps his very reputation for irony enables him to speak his mind freely at times, as Al-Fārābī says (1972b, 83–85)? In other words, perhaps Vasiliou’s observation—that “Socratic irony is potentially fertile ground for exegetical abuse. It can seem to offer the interpreter the chance to dismiss any claim [that] conflicts with his account . . . merely by crying ‘irony’” (1998, 456)—did not escape the notice of Socrates or Plato (cf. Leibowitz 2010, 21–37)? Bolotin’s method of interpreting Plato is, it seems to me, “the only one that allows for Socratic irony . . . without compelling us to make arbitrary decisions as to which among his assertions he meant seriously” (1987, 39–41).

37. Socrates’ subsequent, explicit recourse to these very causes instead of the separate forms leads Kanayama to believe that “Socrates must be ironic or confused” (2000, 69).

38. Burnet 1911, 111.

39. Stern 1993, 123.

40. For a discussion of the various manuscript readings, see Sharma 2009, 145.

41. Concerning the comparison of 100e5–101b7 with 96d8–e7, scholars who do not doubt Socrates’ seriousness about the separate forms need to account for the discrepancy somehow; merely to say, as Huby does, for instance, that the latter passage is “misleading. It is a dramatic way of emphasizing his state of bafflement” will not do (1959, 13; see also Vlastos 1969, 309). Hackforth identifies the discrepancy—and notes in the process that, strangely, it does not trouble the commentators—but his proposed solution requires that we revise the plain meaning of Socrates’ words at 96e (1972, 124n.2).

42. Of Socratic elenchus (refutation), Robinson says, “[it] involved persistent hypocrisy; it showed a negative and destructive spirit; it caused pain to its victims; it thereby made them enemies of Socrates; it thereby brought him to trial, according to his own admission in Plato’s *Apology*; and so it brought him to his death” (1996, 12). Moreover, he says, “If elenchus really makes people hate you, surely it is bad teaching and a bad form of intercourse in general. We can hardly suppose that after the victims’ anger has cooled they admit their ignorance and start to reform their lives, for the *Apology* implies that most of them have remained angry and unconvinced to the

end of their days” (18). These remarks serve to indicate a connection between Socrates’ method and the anger of others, but they go too far in a number of directions. For one, it is not true that the objection that Socratic elenchus aroused hatred “is not noticed or met in the dialogues” (18). To say nothing of the separate forms, it suffices to mention the *Gorgias*, a dialogue in which Socrates both notices and tries to meet this objection (Stauffer 2006).

43. Gallop 1975, 187 (emphasis added); Byrd 2007, 142–43; Hackforth 1972, 138–39; Irwin 1995, 166; Kanayama 2000, 52; Sayre 1969, 3–4.

44. Bostock 1986, 168.

45. Robinson 1953, 136.

46. Bostock 1986, 170n.11; Bluck 1955, 116n.2; Gallop 1975, 235n.67; Robinson 1953, 136; Sayre 1969, 21n.24; van Eck 1996, 221n.10.

47. Lampert insists along similar lines that the difference between Socrates and Cebes or Glaucon must be kept in mind, for “what briefly satisfied a nineteen-year-old philosopher until Parmenides disabused him of it can permanently satisfy young—and old—nonphilosophers, satisfy them that problems of no real concern to them . . . have been solved by Socrates and other philosophers who know the ideas. For them the ideas are what Socrates told Cebes they were, the safe way to think about cause. What the young philosopher Socrates was forced to move beyond can satisfy young Glaucon forever” (2010, 331).

48. Sayre is all but led to the view that Plato is here saying different things to different audiences. As he puts it, Plato wrote the passage “for the consumption of the mathematicians in his audience,” on one hand, and for “the reader with specifically philosophic interests in mind,” on the other, and he expected them to interpret it differently (1969, 39).

49. Hackforth 1972, 139.

50. The same contradiction in law is presented earlier in the *Phaedo* in somewhat other terms. Suicide is, in short, sometimes good; consequently, a (divine) law that prohibits it is sometimes bad (61e5ff.).

51. In Socrates’ earlier refutation of Simmias’ objection, we have an example of this sort of thing in action. As Bedu-Addo says, “we are to test the hypothesis by means of the Socratic elenchus in much the same manner as Simmias’ logos, namely, that ‘the soul is an attunement’ is tested at 92a–94e. If the hypothesis leads to conflicting or absurd consequences, as in the case of Simmias’ logos, we should naturally abandon it and start all over again with another hypothesis; for the first has been refuted” (1979, 120). See also Gallop 1975, 166. The so-called Socratic fallacy (Geach 1966; Santas 1972; Beversluis 1987), which goes back to a suggestion of Wittgenstein (1964, 19–20), has to be understood in context and along these lines. Socrates is attending especially to certain peculiar, controversial classes (cf. *Alcibiades* 111b11–

112b9, *Phaedrus* 263a2–b1, *Euthyphro* 7b6–d8, *Hippias Major* 294c8–d3). The same goes for the so-called self-predication assumption, that is, the meaning of “those perplexing sentences—‘Justice is just,’ ‘Beauty is beautiful,’ and the like—which have occasioned so much controversy” (Vlastos 1995b, 215). Socrates is preparing the ground for the discovery that x is not- x .

52. Burnet 1911, 114.

53. For other accounts of Socratic elenchus, see Benson 1987; Brickhouse and Smith 1991; Nehemas 1986; Vlastos 1983.

54. “It seems very probable that what he has in mind is similar to what Simmias had in mind in 85c, when he said that, if the truth seems not to be discoverable, then one should ‘adopt the best and least refutable of human doctrines’” (Bostock 1986, 163).

55. The form is not in fact the cause of (the coming into being or perishing of) anything. And yet while the “final proof” of the *Phaedo* (103c1off.) does not prove that the soul is immortal (Peterson 2011, 181n.26, cf. 14, 233), it does prove that the formal cause, such as it is, produces “effects” of a sort. Among other things, what is said to be formed or classified in one way cannot at the same time be said to be classified in another, opposed way. And would the resulting criterion of the sufficiency of a speech or interpretation—the principle of noncontradiction—not permit us perhaps to break out beyond “the hermeneutical circle” that, in Charles Taylor’s view, e.g., prevents “a science of interpretation” like “the study of politics” from satisfying “the requirements of intersubjective, non-arbitrary verification” (1985, 15–21)? “If we say X , can we then consistently say both Y and Z ?” This is the kind of question where we *can* get both rigor in procedure and agreement on results,” even according to Richard Rorty (1979, 410). For if someone were to say that a number is odd, can that person then consistently say that it is even? And if someone were to say that the material cause is different from the form, can that person then consistently say that it is the same as the form? And if a someone were to say that “justice does not allow that the sacrifices imposed on a few are outweighed by the larger sum of advantages enjoyed by many,” can that person then consistently say that “an injustice is tolerable only when it is necessary to avoid an even greater injustice” (cf. *Republic* 519d4–520e1)? Or would these people, however wise they may be reputed to be, “know nothing of what they speak” (*Apology* 22c3). See Xenophon *Memorabilia* IV.2.21.

56. Thus, I agree with Karasmanis that dialectic includes both a “downward path” and an “upward path” (2004, 32); I am unable to follow his account of either, however.

57. Accordingly, in one of his statements on the Socratic method, Strauss says to begin with that the dialectical ascent to the truth “may be said to be *guided by opinions*,” but shortly afterward he says that “the ascent to the truth proves to be *guided by the self-subsistent truth* which all men always divine” (1953, 124, emphasis added).

58. Irwin declares that Socrates' "remarks are too brief and imprecise to give us a very clear impression of any specific method that he might have in mind" (1995, 167), which is not true. It would have been more accurate for Irwin to limit himself to saying that his own account of Socrates' remarks does not "give us a very clear impression of any specific method that [Socrates] might have in mind."

59. "There is hardly anyone," Friedländer ventures to say, "who has not identified the *hikanon* of the *Phaedo* with the *anhypotheton* of the *Republic* (511B)" (1945, 256; cf. Byrd 2007, 143). See, e.g., Bedu-Addo 1979, 111–32, 122–24; Bluck 1955, 15–6, 24–25, 112; Irwin 1977, 222, 336n.7; Karasmanis 2004, 47n.35; Nichols 2009, 206; Rowe 1993b, 55; A. Taylor 1956, 107; Vlastos 1978, 539–40. But contrast Murphy 1936, 46; Robinson 1953, 157; Rose 1966, 466; Sayre 1969, 40–44. Although I agree that the two passages are compatible, I disagree with the usual reading of both, which, in accord with the rhetoric of the *Republic* passage especially, tends to idealize philosophy or make it firmer at its base and more comprehensive in its scope than it actually is in Socrates' view (cf., e.g., Gadamer 1991, 73–77; Stern 1993, 126–28; A. Taylor 1956, 201).

60. In fact, there were aspects of the earlier analysis of cause that we were unprepared to make out with perfect clarity when we carried it out—because we carried it out in the absence of a general description of dialectic—which may become clearer now, in light of such a description. The dialectical method presupposes that the opinions or speeches to which it is applied, whether they pertain to cause or to justice, for example, are contradictory from the start. And so starting from an initial state of confusion, in which the lines between the four kinds of causes were blurred almost beyond all recognition, the young Socrates was guided by the (not yet fully conscious or transparent) application of this method to grasp with increasing clarity or precision the material cause, the efficient cause, the final cause, and the form in their distinctness from one another. Ascending dialectically, he proceeded gradually, perhaps even falteringly, from contradictory opinions concerning cause to a sufficient account of it. The sufficient, the strongest account of cause finally amounted, we now know, to the fourfold division Aristotle later took over from his teacher, Plato. And, through this division, the form emerged as that one of the four causes with which Socrates is particularly concerned (100b3–4). This much—that is, as much as pertains to the dialectical ascent—was clear enough before now. But as for the fact that a descent followed on and complemented the ascent, this aspect of the matter becomes perfectly clear only now that the dialectical method has been generally described. In particular, until all four causes are individually recognized and set apart from one another, or until the ascent to the fourfold division of the causes has actually been completed, even the cause or causes that are somehow recognized must remain less than fully transparent as such. The recognition or grasp one has of it or them is bound to be a gradually improving, a somewhat wavering, and perhaps even a faltering one.

For example, the material and the efficient causes—causes all natural scientists, including the young Socrates, must have at least some grasp of—can be made partly, but not fully, transparent so long as the form, too, has not been recognized and set apart from them as a distinct kind of cause.

61. Stern (1993, 122–23) points out, contrary to Gallop (1975, 183), the difficulty with the forms being (efficient) causes. See also Aristotle *On Generation and Corruption* 324b10–19.

62. Faced with these consequences, Sedley acknowledges that “it is tempting to react with counterexamples. Must the cause of someone’s death,” he says (1998, 123), “be itself dead?” His subsequent effort to save the doctrine from this and other absurdities does not of course succeed. See also Gallop 1975, 213.

63. For instance, Socrates suddenly speaks of comparatives as separate forms, too. As Stern points out, however, it is obviously “impossible to conceive how something being *larger* could be an absolute” (1993, 123).

64. It is frequently assumed that, despite their obvious difficulties, these features characterize Socrates’ view of the separate forms and, what is more, constitute his objections to natural science. See, e.g., Kelsey 2004, 23–24; Matthews 1989, 583–84; Cresswell 1971, 245; Bostock 1986, 137; Gallop 1975, 184–87; Dorter 1982, 129–30. Again, Stern is far more cautious (1993, 124).

65. This is demonstrated at greater length by Socrates elsewhere (*Hippias Major* 288e6–289d5; cf. Bruell 1999, 80–81). Perhaps Bostock came close to seeing the incoherence (1986, 156).

66. As DeLacy notes, “The Theory of Ideas . . . evades precise formulation” (1939, 99).

67. Rowe says that this means Socrates cannot be serious (1993a, 244).

68. These passages alone make it impossible to accept Hankinson’s assertion that there is no adequate “ancient attempt to deal with relations” (1998, 90n.13).

69. Martin 2008, 33, 47.

70. “The fact that nobility or beauty is an ingredient of gentlemanship, or a concern of gentlemen, is not something perceptible through sight but only through hearing,” says Bruell (1984, 288). Thus, because one can learn this only “through ‘hearing’” (292), learning it presupposes Socrates’ new approach to the whole (281n.8).

71. Bruell 1984, 317.

72. Contrast Sedley’s effort to understand “why Plato is so fiercely attached to the principle that opposites cannot cause opposites” (1998, 199ff.).

73. See Hobbs 2000, 220–27.

74. “Unless one were defending a thesis” (*Nicomachean Ethics* 1096a1) and “voluntarily not making sense” (1153b19–21) as Aristotle says, clearly alluding to Socrates. For further discussion, see Stauffer 2006.

75. Cf. Barney 2010.

76. See Chapter 3, note 9 above.

77. Aristotle, who shared his teacher's understanding of Socrates' new approach, affords us the opportunity to summarize much of what we have learned from Plato. According to a suggestion of his, Socrates was responsible for instigating a total loss of interest in natural science on the part of others who philosophized and for causing them to become concerned, instead, with "useful virtue and political [science]" (*Parts of Animals* 642a28–31 in context). But this change in concern coincided with another, purely theoretical development that Aristotle appears to hold Socrates responsible for, too. Socrates' predecessors, the pre-Socratics, had no notion of the form, i.e., of "the what it was to be" and of "the defining of being" (642a25–26). There were—indeed, there had to be (cf. 642a18–19, 27–28)—occasional concessions on their part to "this sort of cause" (642a24). Empedocles, for example, was sometimes compelled to say that "the being and nature [of a thing] are the speech (*logos*) [about it]" (642a18–20). But these were concessions whose significance, that is, whose necessity, Empedocles and the other pre-Socratic natural scientists did not fully grasp. They did not recognize that this, the nature of a thing, is a principle (*archē*) more so than the material (cause) (642a24–28; compare *Metaphysics* 993a17–24, 1078b19–21, as well as *Physics* 192a20ff.). This came to be recognized only later, in the time of Socrates (642a28–29, 25–26). Thus, in addition to changing what philosophers or scientists set out to account for or explain, Socrates actually changed how they went about giving their (causal) accounts; and, in *Parts of Animals* A1, Aristotle calls attention to Socrates' revolutionary impact, in both of these respects, on the science of his age. At the same time, he points to a question about the Socratic revolution that he makes no effort to answer there: how exactly are the two developments constitutive of it related to one another, if indeed they are?

Elsewhere, in *Metaphysics* A4, Aristotle asserts that Socrates, rather like those who fell under his influence, concerned himself exclusively with "the ethical things" and not at all with "the whole of nature" (*Metaphysics* 987b1–2, cf. 1078b17–18). He adds to this later on, in M6, that Socrates himself was the first to set his mind on universals, in definitions or through the (inductive) speeches leading up to them (1078b27–29, cf. 1078b18–19, 987b2–4). To put this differently, he was the first to seek—"reasonably," in Aristotle's estimation—"the what it was" (1078b23–24, cf. 1078b25–27; *Parts of Animals* 642a17–20, 25–26). In both cases, in *Metaphysics* A4 as well as M6, Aristotle does not speak of Socrates' influence over others, as he did in *Parts of Animals* A1, but of the man himself. Yet is to assert that Socrates concerned himself exclusively with the ethical things not to deny what Aristotle adds later on, that he recognized "the what it was," as a sort of cause, in its primacy to the material cause? As if to "walk back" his earlier assertion, Aristotle stops short of repeating it

in his later statement about Socrates (compare 1078b17–18 with 987b1–2) where, in fact, he goes so far as to disclose instead that Socrates' originality as a philosopher was due entirely to his peculiar approach to "the starting-point (*archē*) of science" (1078b27–30). The question of the starting-point of science does not belong among *ta ethika*. Aristotle's disclosure in M6 therefore amounts to a qualification of his earlier assertion in A4 that Socrates was concerned exclusively with such things; and that qualification compels us to favor the later, weaker formulation of that concern (1078b17–18). Now—that is, now that Socrates' concern for ethics and politics has to be understood in the context of a deeper concern on his part for science and thus, given the intimate connection between science and nature, "the whole of nature"—the relation Aristotle pointed to when accounting for the Socratic revolution in *Parts of Animals* A1 becomes somewhat easier to comprehend.

Dialectic is, by Aristotle's account, almost impossible apart from a prior recognition of "the what it was" (1078b25–27). For the dialectician needs to syllogize—starting from the definition of the universal, he seeks to descend again to the particular beings that first led him up, by way of induction, to the definition of the universal (*Nicomachean Ethics* 1139b28–31, 1095a30–b4; compare *Metaphysics* 1078b27–29 with 1078b24–25)—but the first starting-point (*archē*) of syllogisms is "the what it was" (*Metaphysics* 1078b24–25). Of course, Socrates' approach to all things, including ethical and political things, was a dialectical one. He sought consistent (1078b26–27) definitions of the relevant universals (987b2–4, 1078b17–19), for example, of justice (cf. 1078b23). And it follows from this that Socrates was enabled to pay unprecedented, if not exclusive, regard to the ethical things only as a result of and through his equally unprecedented grasp of "the what it was" (compare *Nicomachean Ethics* 1139b28–31 with *Metaphysics* 1078b23–25). Socrates' apparent turn from natural to political science was therefore made possible and shaped by his new approach to scientific (causal) accounts or to the whole of nature. For a discussion of the different ways in which Aristotelian and Platonic political philosophy treat the same philosophic foundations laid by Socrates' turn, see Sebell 2015.

78. Bruell 1984, 281n.8.

79. As Lloyd puts it, "Socrates' distinctive contribution was to turn the searchlight of his scrutiny on current moral and political assumptions to expose—as he saw it—their shallowness and incoherence" (1979, 86).

80. The historical Socrates refused to write, so he may not have had as much of a need for the rhetorical cloak Plato or the Platonic Socrates did. Xenophon, who had other ways of keeping his Socrates' wisdom concealed, and who did not make Socrates "beautiful and young," mocks Plato's so-called theory of ideas (*Memorabilia* III.14.2).

81. See Irwin 1977, 148ff.

82. See Burnet 1911, 32–33.

83. In brief, what Socrates says especially of the “practical” or “active men” (*Republic* 476a10)—“the many” (Rowe 2007, 204 n.14), who as non-philosophers (476a9–b2) hold the high universal (476b10–11) opinion that there are multiple noble (beautiful) or just actions or affairs (*pragmata*) (476c2, 479a3, 479e3) and who love them as such (479e10–480a3)—is that they are unable to see or to approach the noble itself or the just itself (476b6–8, 476c2–4, 478e7–479a3, 479e1–4). More than that, he adds, these men cannot “endure” the fact that the noble itself is something (480a3–4) or “endure” it if someone, i.e., a philosopher, tells them that the noble or the just is “one” unchangeable thing (478e7–479a5). Why not? The multiple actions or affairs that non-philosophic men, or “dreamers,” as they are appropriately called (476c4–7), hold to be noble, just, or pious necessarily appear, from another point of view, base, unjust, or impious; in their multiplicity, they are changeable (479a5–b10). But the inability of the dreamers to endure the philosophic view (that each of these things is one and unchangeable) does not stem from a conscious belief in, or a perverse enjoyment of, the multiplicity and changeability of just, noble, or pious actions as such (contrast Irwin 1995, 264–71). To the contrary, they fail to distinguish clearly between just actions, for example, and justice itself—or, to put this in plainer terms, they assign to the multiple, changeable just actions a certain unity and unchangeableness (which they do not in fact possess) and to the unity and unchangeableness of justice itself they assign, in turn, a certain multiplicity and changeability (which it does not in fact possess) (476c4–7, 476c9–d3; cf., e.g., Euthyphro’s response to the multiplicity Socrates uncovers lurking within his view of piety: *Euthyphro* 11b6–d2, 15b7–c3; Rowe 2007, 206–7; cf. Peterson 2011, 130). As opposed to the philosophers, who do not conceive of justice or nobility or piety as many and as one (476c9–d3), the dreamers are confused. And what they are unable to understand or to endure is the philosophic effort to remove their confusion. They have such a stake in preserving it, in fact, that Socrates anticipates that the philosophic view, if or when uttered, risks making the dreamers “angry” (476d8) and perhaps even “extremely angry” (cf. the condition Glaucon mentions at 480a6–10 in light of 476d9; see Benitez 1996, 526, 528). Somehow, those inclined to become enraged when their (evidently, relatively pleasant) slumber is disturbed by the philosopher’s insistence on the unity of justice, nobility, or piety have to be put back to sleep. Socrates therefore calls for something, some speech (476e4), to “alleviate” or “mollify” the dreamers, to “gently persuade” (not teach) them, and to “conceal” from them that they are not sound or healthy (476e1–2). The hypothesis of the separate forms, which supports the opinion that justice, for example, can be many and one, does just this.

84. Polansky objects to Vlastos’ famous account of Socratic elenchus (1969) because “we might well wonder why these interlocutors so rarely renounce their prior

admissions when they discover the problems they cause them. This is an important question and one that we might expect Vlastos to consider. But in fact it does not occupy him at all” (1985, 248). The abovementioned hope is my main response to the thrust of Polansky’s objection. For the account of this hope and its genesis, see Levy 2013. Hundreds of experiments carried out by the social psychologists behind “terror management theory” support the conclusion of Socratic dialectic that morality gives us hope in the face of death (Solomon, Greenberg, and Pyszczynski 2015).

85. For an extensive discussion of the present-day prejudice against the suggestion—as we have seen, it is Plato’s suggestion—that the so-called theory of ideas is “exoteric,” and for a catalog of evidence that, like it or not, “philosophical esotericism” is a widespread historical fact, see Melzer 2014. See also Chapter 1, note 3.

CONCLUSION

1. Behnegar 2003, 2.

2. As regards “history”—at its core, the more impressive of the two modes of thought to which Alfred Cobban attributed “the decline of political theory” in modern times (1953, 333)—it depends on a theoretical critique of science or human reason that hardly anyone before or after Heidegger has been able to deploy. In particular, historicism depends at its core on a defense, of sorts, of our prescientific, common sense awareness of the world over and against “science” or “philosophy,” a defense that then leaves that world populated with witches or the like. Socrates for his part could not have denied that the world somehow presupposes man, as we saw; nor could he have insisted on man’s permanence. But whereas historicism concludes from this situation that each and every man—or rather community—is the measure of the world, Socrates felt free for some reason to leave it at (the philosophic, that is, the awake) man.

3. “Post-structuralism and analytic philosophy,” says John Coates, “share, ironically, a common starting-point—a belief that the vagueness of ordinary language inevitably leads us astray. The dominant philosophical paradigms in the English-speaking world and the Continent differ characteristically in that the former sees our salvation in the ascent to a rarified, Apollonian realm of formal semantics, while the latter recommends a descent into the Dionysian underworld of metaphor. These alternatives are the philosophical gamut that common sense must run today. . . . *They are also the ones which map out the methodological possibilities for the social sciences*” (1996, 4, 2, cf. 9, emphasis added).

4. Richard Rorty is surely the starkest example of someone for whom the renun-

ciation of the search for knowledge of “values” appears to have had the welcome consequence—or purpose, rather—of excusing loyalty to the current regime. And yet, given the openly acknowledged “symbiotic” relationship between political science and loyalty to the current regime (Keohane 2009, 362–3), could the former also be somehow akin to “the art of kalām” (Al-Fārābī 1972a, 27ff.)? However that may be, “the decline of political theory” is surely due at least in part to moral-political opinion. For if we claim to know that the current regime is just and worthy of loyalty as such, and if we also (but inconsistently) believe that a condition of loyalty to the regime is the renunciation of “absolutism”—that is, of claims to know what is just and unjust—then the search for knowledge of justice, or political theory so understood, is liable to arouse our fear and anger (Gunnell 1993, 144; Behnegar 2003, 189–206).

5. Strauss 1968, 213; 1953, 79.

6. Moreover, if Socrates’ reason was sufficient, then the most elementary and fateful difference between ancient and modern (political) philosophy would be the latter’s ignorance of the need to take its bearings from common sense or “what is said” (Strauss 1952a, 163, cf. 165). See p. 115 above.

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ABBREVIATIONS

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